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EVALUATION
HEALTH PROMOTER PROGRAM
MINISTRY OF HEALTH, PERU
JANUARY-JUNE 1984

VOLUME I

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VOLUME II

Code Book, Promoter Survey

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Code Book, Community Survey

Crosstabulations, Community Survey

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MINISTERIAL RESOLUTION

Lima, 30 June 1983

"IN CONSIDERATION OF THE FACT:

That Peru has adopted Primary Health Care as its fundamental strategy for achieving the social goal of HEALTH FOR ALL BY THE YEAR 2000; and

That it is appropriate to have uniform criteria regarding what is to be understood by Primary Health Care;

IT IS RESOLVED:

To adopt as the official definition of the Ministry of Health the following:

Primary Care is basic health care developed by the community with multisectoral assistance through appropriate technology dedicated to the improvement of levels of health and welfare. It represents the first level of care and the initial contact between the individual, the home, and the community with the formal health system, particularly the Health Post and the Health Center, although the opportunity of each individual to seek care at more complex levels of care as his or her state of health requires is assured.

Primary Health Care comprises the following components:

a) A unified philosophy
b) Community development
c) Mechanisms for intersectoral articulation
d) Participation of all components of the National Health System
e) Participation of all levels of the organization
f) Establishment of levels of attention
g) Active participation of the community
h) Appropriate technology
i) Minimal development interventions."

List of Acronyms

AHA= Hospital Area
AID= Agency for International Development
ALAFARFE= National Association of Pharmaceutical Laboratories
AMIDEP= Multidisciplinary Association for Research and Training in Population
CNP= National Population Council
CORPIURA = Piura Development Corporation
CRS= Catholic Relief Services
DSMIP= Directorate of Maternal-Child Health and Population (MCHP)
FAO= Food and Agricultural Organization
GOP= Government of Peru
HNE= Health, Nutrition, and Education Office (USAID/Lima)
HPVO= Private Voluntary Health Organization
IBRD= International Bank for Reconstruction and Development (The World Bank)
INE= National Institute of Statistics
MCHP= Directorate of Maternal-Child Health and Population (DSMIP)
MOH= Ministry of Health
MSH= Management Sciences for Health
IPSS= Peruvian Social Security Institute
IDB= Inter-American Development Bank
ILO= Office of International Labour (OIT)
INPROMI (P)= Instituto de Neonatología Y Protección Materno-Infantil
OIT= Office of International Labour
OMS= World Health Organization (WHO)
ORS= Oral Rehydration Salts
ORT= Oral Rehydration Therapy
PACD= Project Authorization Completion Date
PAHO= Pan American Health Organization
PAMI= Maternal/Child Nutrition Program
SAIS= Sociedad Agricola de Interés Social
TBA= Traditional Birth Attendant
THP= Traditional Health Practitioner
UNICEF= United Nations Children's International Educational Fund
UNFPA= United Nations Fund for Population Activities
USAID= United States Agency for International Development
VHW= Village Health Worker
WHO= World Health Organization (OMS)

CHAPTER I. INTRODUCTION

A. Program Description

"Extension of Integrated Primary Health" (527-0219) and "Integrated Health and Family Planning" (527-0230) are complementary projects which are being executed simultaneously in 14 of Peru's 17 national health regions. The "Sur Medio (Ica) Maternal/Child Health and Population" project (527-0224), a model integrated delivery system for health and family planning which was the pilot predecessor to project 230, brings the number of AID project regions to 15.* Disbursements for line items which are common to 219 and 230, such as supervision and training, are made first from project 219, but project committees are standardized for both projects. Because 219 and 230 are being implemented concurrently and are interrelated, this evaluation will treat them as they are treated in USAID reporting documents (USAID, March 1984), as one project.

The objective of Project 219 is to extend primary health care to the rural community level by: 1) strengthening the role of health auxiliaries (auxiliares) and health posts (postas médicas/puestos de salud) through provision of adequate training, equipment, and essential medicines; 2) selecting and training community promoters (promotores) and midwives (parteras) and providing them with simple equipment and medicines; 3) introducing health education activities into environmental sanitation programs; and 4) providing support for an information system for management and evaluation purposes (USAID, March 1984).

Project 230 strengthens these primary health services in both rural and urban areas by equipping selected health centers with family planning equipment and providing iron tablets, oral rehydration salts, and multi-vitamins to all auxiliary health personnel for distribution. In some regions, family planning commodities are being provided to community promoters and midwives; the ultimate objective is for all promoters and midwives, nationwide, to provide family planning

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* For 219, Life-of-Project Amount authorized (on 12 September 1979) was US$7.15 million, of which US$5.8 million was loan- and US$1.35 million was grant-funded; Government of Peru (GOP) counterpart contribution was US$2.4 million and the Project Activities Completion Date (PACD) is 30 January 1985. For 230, Life-of-Project Amount authorized (on 21 June 1981) was US$10.8 million, of which US$4.0 million was loan- and US$6.8 million was grant-funded; GOP counterpart contribution was US$3.6 million and the PACD is 30 June 1986. The Sur Medio project, signed July 1979, was originally a centrally-funded grant of US$1.8 million.

services. The project also includes training for professional and paraprofessional staff in public health and health administration, supervision, and logistics, as well as training for urban health promoters who distribute basic health commodities and refer patients to health centers or hospitals as appropriate.

Both projects 219 and 230 were developed in direct response to the request from the Peruvian Ministry of Health for support of its National Plan for integrated primary health care (PHC) and for delivery of family planning (FP) services. The first project was directed toward under-served rural areas; the second expanded USAID funding of PHC activities into marginal urban areas (pueblos jóvenes)and was intended to integrate FP services into the public health system in both urban and rural settings. Project 230 also provides support for several private- and public-sector FP organizations, including support for the GOP's National Population Council (CNP).

These projects, together with various ancillary grant-funded activities, are compatible with and indeed reinforce the Peruvian National Coordinated Health Plan (PNACS) for 1982-1985, which was set forth by the incumbent government elected in 1980. The Plan is predicated on primary health care as the best way to fulfill its stated commitment to the Alma Ata Year 2000 goals. Its objectives are to : 1) reduce mortality and morbidity, particularly among the poorest rural and urban-marginal populations; 2) develop maternal/child health services, including implementation of national population policy; and 3) improve the efficiency and expand the coverage of public health services. The 1983-1984 Sectoral Plan (MOH, August 1983) focuses these objectives more precisely on infectious, diarrheal, and respiratory diseases, and on environmental sanitation.

To achieve these goals and to address the problems noted by the incumbent Minister of Health in May 1982, of "incoherence and inter-sectoral disarticulation which generates problems in the development of human resources, in administration, in the creation of infrastructure, and in the production of health inputs," it is the intent of the Ministry of Health to take the following measures: reorganization of that Ministry, especially its central administration; designation of a special commission of the MOH to prepare a national PHC policy and implementation plan; improved coordination of foreign and technical assistance; improvement of the physical infrastructure of the MOH and its systems of logistics, pharmaceutical supply, information, supervision, evaluation, and control; and establishment of an intersectoral coordinating body to strengthen community participation (Sotelo, July 1983; MOH, August 1983).

B. Purpose of the Evaluation

1. Background of Promoter Programs in Peru

The history of health promoters in Peru is 50 years old. Many regions have their own independent histories of a variety of programs, national and international, public-sector and private-sector, of varying depths (see regional Planes Operativos). The region with the

deepest history is Puno. In 1933, Dr. Manuel Munoz Butron created in Puno the role he termed "rijchari" (literally, "awakener"), filled by individuals recruited from local indigenous populations, who were trained to vaccinate, teach sanitation, explain the causes of illness, and generally perform the work of conscientization.

In 1941, the Directorate of Indian Affairs in the Ministry of Labor formed mobile Indigenous Education Brigades (Brigadas de Culturización Indígena), composed of a teacher, an agricultural technician, and a health technician, whose purpose was to educate Indian adults through lectures (charlas) and demonstrations, also in the Puno area.

Between 1942 and 1953, an activity supported by the Rockfeller Foundation under the direction of John Hydrik, trained "visitadoras de higiene" (health visitors) who did health education premised on psychological and anthropological principles in the Ica area.

In 1945, the MOH and the United States government formed the Interamerican Cooperative Public Health Service (SCISP), which trained the first health auxiliaries to work in rural areas and the first urban health visitors, and created the Amazon River health service.

Between 1952 and 1955 the Peruvian government, with the cooperation of the Office of International Labour (ILO/OIT), the Food and Agricultural Organization (FAO), and the World Health Organization (WHO/OMS), set up an economic rehabilitation program for aboriginal populations, under which indigenous "health promoters" were trained for collaborative activities.

Throughout the 1950s and 1960s, there were a number of multisectoral efforts involving the Ministries of Education and Agriculture (and sometimes the Catholic Church), funded by the Ministry of Health, which produced health supervisors and home economists (mejoradoras del hogar) who were in charge of health posts in rural school nuclei (núcleos escolares campesinos). This activity was coordinated with the Integrated Program for Applied Nutrition (PINA) which, with the help of WHO and UNICEF, promoted improved nutrition and food production, set up school and family gardening and poultry projects, and built nutrition rehabilitation centers.

And in 1965, the National Council for Community Development obtained financial support from the Inter-American Development Bank (IDB/BID) for its Project for the Development and Integration of the Indigenous Population in seven Andean areas; its promoters emphasized local initiatives for the solution of local problems, including health, and involved the participation of the Instituto Indigenista del Peru, the National Planning Institute, the Cooperative Institute, the Federation of Campesinos, and the Ministries of Health, Education, and Agriculture.

To all these must be added other regional and local initiatives, national and international, lay and religious, private and public, on-going and ad hoc, which have trained health outreach workers all over Peru and which have had some kind of community or participatory

orientation; in the last few years, this has come to include training and upgrading of existing traditional practitioners and midwives (TBAs) and the formation of Community Health Committees (Comités de Salud) (Sotelo, July 1983; Susuki, 1983). In a recent assessment of the role of the private sector in health delivery, Keaty (1983) found that, out of 423* private voluntary organizations working in health (HPVOs) for which specific documentation was available, 270 were HPVOs devoted primarily or exclusively to primary health care.** Of these, 32 (12%) provided clinical services with health promoters.

Because of the generally small scale of these individual efforts, because of the variety of trainers and their backgrounds, and because these programs have largely developed outside any established primary health system with standardized norms and curricula, this long history of the promoter solution to health outreach in Peru has produced a plethora of promoter types and roles which now vexes the Ministry sorely. National procedural norms for maternal/child health and normative curricula for TBAs and health promoters were not developed until the 1970s, when this task was undertaken by a special unit in the MOH called INPROMI, which was meant to function importantly in defining and guiding PHC services. These norms were revised in 1983 (MOH, April 1983; see Appendix K) by the MOH Central Administration, and the MOH Health Regions programmed training courses for over 1,300 rural and urban health promoters for that year. However, there are some basic problems:

> "Due to wide differences in the epidemiology of disease and health care needs among the 17 Health Regions of Peru, the Central MOH assumes that each Region will modify and adapt any national norms to local realities. Therefore, occupational profiles, especially for health promoters, have a wide variation both among and within Regions. In one Region surveyed, at least seven different sources were used for promotor curricula in Health Centers. A good number of Centers write their own curricula. This has led to the current situation of non-uniformity of promotor activities, difficulty in uniform data collection capability, and difficulty in standardized coordination with the needs and wants of the community. This point was especially emphasized during the Multisectoral Coordination Seminar in Puno, Nov. 8-10, 1983.

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* Keaty notes that there could be as many as 800 of these, when both Peruvian and non-Peruvian programs are included.

** Such PHC programs provide a wide range of services including clinical, educational, curative, and preventive services. Some programs are part of an integrated development program, others are stand-alone clinical programs. Some programs have been integrated with MOH services. These primary care programs are part of a large, heterogeneous group of small projects and reach an estimated 2,167,567 people, with over half of their coverage and expenditures in rural areas. If CARE and Catholic Relief Services (CRS) are excluded from this figure, it drops by approximately 1 million.

> "There is a real lack of consensus as to what the community level health worker should be allowed to do, for the promotor more so than for the TBA.... The development of basic minimum occupational profiles for personnel at all levels of the health system is hampered by lack of a standardized definition of PHC for each level of service. What is needed is an official profile of personnel from physicians down to the community level for PHC services delivery..." (Altobelli, 1983).

Beyond these problems and needs, the total number of promoters actively working in either the public or private sector is essentially unrecorded and virtually unknowable without a major census. Similarly, the number of dropouts from promoter programs is only erratically recorded and is probably unrecoverable, given the current state of health information and supervision systems.

As for effectiveness in terms of impact on health status and relative cost, the net utility of the health promoter is far from clear. Data from the recent Health Private Voluntary Organization (HPVO) study (Keaty, 1983) suggest that, in general, lower costs and greater coverage are associated with the use of promoters.* Still, these are data from the private sector, where health services typically display higher utilization and productivity rates (though not always lower costs to the consumer) than MOH facilities of similar size and composition, and where market responsiveness** is greater; at the same time, such cost-effectiveness calculations may not fully account for the contribution of home office support for off-shore PVOs or the value of donations, so that true comparability is difficult.

Beyond these considerations, there is also the large question which cuts across them: why, given this long history and substantial numbers of undoubtedly sincere efforts, did virtually all these attempts effectively fade away with so little durable trace? A recent publication (MOH/Puno, 1983) by the Ministry of Health Regional Office in Puno, which includes a much longer but still partial list of promoter efforts

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* The estimated unit cost for the PC-HPVOs as a group was an average of US$2.30, with a range from US$.10 for programs with health promoters to US$9.58 for clinical programs without promoters and with in-patient facilities. Average revenue per patient visit was US$2.50, with a range from 0% to 159% recovered on total unit costs. In some cases, costs are at least partially recovered by promoter markups on drug sales.

** "Market responsiveness" is the matching of services to consumer expectations. PVOs cannot afford to have services that are not intensively utilized because their donors will cease to be generous and their volunteers will stop volunteering. Thus HPVOs must always be aware of how patients want to be served; well-treated patients tend to tell others about the service; and the HPVO enjoys an active and responsive, satisfied patient/consumer population (Keaty, 1983). Ministries of Health, being larger and more politically constrained, find it hard to be so agile and sensitive to client preferences and, indeed, needs.

in that department, suggests a number of explanations: hostility towards the implied threats of successful conscientization, lack of financing, lack of followup and supervision, lack of equipment, and variable and even personalistic program norms and orientation. To these, the same publication suggests the addition of: a) a basic misunderstanding of the appropriate nature of community development and participation and b) the sheer intractability of the socioeconomic and structural facts that militate against good health in the developing world. These explanations must be considered the general hypotheses that underlie the present evaluation.

2. Areas of Special Concern for This Evaluation

Because of all this variability and many uncertainties, the present evaluation is meant to provide a better understanding of who the promoters are, what they are doing, what they cost and what their relative effectiveness is, and what improvements should be made to implement the promoter program and enhance its impact. The purpose of the activity set forth in the Scope of Work, elaborated by the USAID in coordination with the MOH, was to evaluate the implementation of the Ministry of Health's Promoter Program. Through several research methodologies, the evaluation was to address the following areas:

a. Adequacy of the promoter selection process
b. Adequacy of promoter training
c. Acceptability of the promoter in the community and responsiveness of the program to community health needs
d. Promotion attrition rates and reasons for desertion
e. Adequacy of program supervision, logistical support, and incentives
f. Managerial, administrative, and financial requirements of the MOH to implement the current program and additional requirements to implement any suggested improvements.

C. Setting and Rationale

1. The Health Context

The context in which the promoter is to function and the health situation he or she must confront is described by the MOH as "unsatisfactory" (MOH, June 1983). This description is rooted in the following indicators:

Health and Health Delivery Indicators *

Birth rate: (1960) 48.0/1,000 inhabitants; (1981) 38.3/1,000
Life expectancy: (1960) 48.4 years; (1981) 59.1
Mortality:
- General: (1960) 18.6/1,000 inhabitants; (1981) 10.4/1,000
- Infant: (1960) 152/1,000 live births; (1981) 89/1,000
- Children: 0-5: (1960-64) 51.2/1,000; (1975-78) 25.1/1,000
- Maternal: (1960) 40.0/10,000 live births; (1980) 31.8/10,000

Morbidity (by cause):
- Infectious diseases: (1960) 21.1%; (1980) 43.7%
- Vaccine-preventable diseases: (1960) 23.1%; (1980) 10.1%
- Major contributors (infectious diseases):
  - Gastroenteritis, enteritis, and other diarrheal infections: 496.3/100,000 inhabitants
  - Influenza and the common cold: 373.1
  - Other helminthiases: 161.5
  - Typhoid and paratyphoid: 106.8
  - Respiratory tuberculosis: 84.9
  - Malaria: 60.1
  - Whooping cough: 52.9

- Causes of hospitalization:
  - Normal childbirth and complications of pregnancy, childbirth, and post-partum: 37.56%**
  - Infectious diseases: 17.75%
  - Other causes: 44.69%

Human resources (1981):
- Inhabitants per professional:
  - 1,349 per doctor
  - 4,806 per dentist
  - 8,357 per obstetriz
  - 5,114 per pharmacist
  - 1,680 per nurse
- 70% of all health professionals are in Lima:
  - 72.9% of doctors
  - 66.6% of dentists
  - 73.2% of obstetrices
  - 75.3% of pharmacists (químicos farmacéuticos)
  - 68.0% of nurses

The Ministry of Health has 27.6% of Peru's doctors and is responsible for 66% of the population; the Peruvian Social Security Institute (IPSS) has 22.1% of the doctors and is responsible for 13.4% of the population.

Infrastructure (1980):
- 330 hospitals
- 33,181 beds
- 630 health centers
- 1,538 health posts

(1960) 2.43 hospital beds/1,000 population; (1980) drop to 1.87/1,000 due to population growth; strong urban skew in distribution.

Productivity of public health system (1980):
- 1.55 medical consultations/inhabitant
- 4.1 outpatient consultations/100 inhabitants.**

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* Source: J. F. Ponce. SITUATION DE SALUD, POLITICAS Y ACCIONES PRIORITARIAS (presentation in the CAEM). Lima: Ministry of Health. May 1982.

** Attention is provided gratis in the public health system.

The MOH attributes the ultimate cause for Peru's overall poor health status to rural and urban-marginal poverty, produced in its turn by low productivity, un- and under-employment, malnutrition, inadequate environmental sanitation, limited access to educational opportunities, low quality of family and community life, and relative scarcity of human, physical, and financial resources, all aggravated by high population growth (Sotelo, July 1983). The institutional response to this set of conditions is found seriously wanting: unresponsive to the real needs of the population; skewed toward the largest cities, toward the most technologically sophisticated hospitals, toward the chronic and degenerative diseases that afflict the older and minority portion of the population, and toward curative care; uncoordinated in policy and practice; of low productivity; and, finally, characterized by irrational use of what resources are available (MOH, June 1983). Interestingly, the 1980-1983 Plan (MOH, 1980) concluded that whatever improvement in health indicators had occurred since 1960 had done so in spite of a progressive deterioration in health services over the period, and was no more than a manifestation of the worldwide improvement in those rates due to technological, educational, and communications advances in those years. The MOH calculated in June of 1983 that over half of the Peruvian population had no access to fixed health facilities; 25% had no access to any institutional health service whatsoever, although the MOH is responsible for providing health care to approximately 66% of the population, that is, the portion uncovered by any other health insurance or medical program. Furthermore, per capita costs (US$25 in 1981) are high for the limited coverage provided (USAID, January 1984).

The ability of the Ministry of Health to improve this situation is inhibited by the same powerful factors that depress other sectors. The current challenges in Peruvian development.

> "revolve around two short-term conditions: a) a sharply deteriorated economic situation, including weak economic performance, falling standards of living, and a serious liquidity crisis manifested in international and domestic credit shortages, and b) ...natural disasters, which have enormously complicated the process of establishing the financial base needed for the structural transformation of the economy.... In addition to dealing with the short-term crises, Peru must come to grips with a number of critical problems...: 1) inadequate resource mobilization and utilization, 2) low incomes and employment, 3) faltering food production and agricultural productivity, 4) limited social service coverage, 5) rapid population growth,* 6) urbanization and centralization.
>
> "In addition...many other factors impose conditions on the efficiency of development investments in Peru and the country's ability to progress. Fragmented social structures -- different languages, customs, and mores -- make national

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* Current population growth rate, 2.6%; total fertility rate, 5.2 live births per woman. At current fertility rates, Peru's present population would grow from 18.7 million to 69 million by the year 2025 (USAID, January 1984).

integration difficult.... The geography is extremely rugged. It hampers the easy flow of people, goods, and information, and makes infrastructure and service programs costly. The arable land base is small -- 3% is suitable for crops -- and not well matched with water resources, requiring costly irrigation investments.... Natural resources, including fisheries, forests and soils, continue to be used unwisely, causing growing environmental damage and early depletion.... In addition, Peru has been hit by three major earthquakes, three major droughts, extensive floods along the coast, periodic landslides, strange shifts in ocean currents that disrupt fishing resources and weather patterns, and earthquake predictions that have frightened off tourists. These natural disasters have cost the country billions of dollars in lost production, exports and reconstruction costs and seriously set back the overall development of Peru" (USAID, January 1984).

The recurrent cost requirements of the present MOH infrastructure already exceed available finances, and the Ministry's purchasing power is decreasing at the same time that major infrastructure expansion projects are being implemented. There are chronic management and administrative problems, as well as chronic shortages of funds and drugs that will certainly get worse, as will the ability of personnel compensation rates to keep up economically (USAID, January 1984; MSH, 1983). Epidemiological and cultural heterogeneity, a commitment to decentralization and regionalization which has not yet found a comfortable operational level, and the continued pressure to deliver primarily urban-based curative services and provide all services free, all make it very difficult for the system to deliver high-quality, basic curative and preventive services to a greater number of people. All things being equal, system utilization rates and general productivity would decrease from levels that are already low.

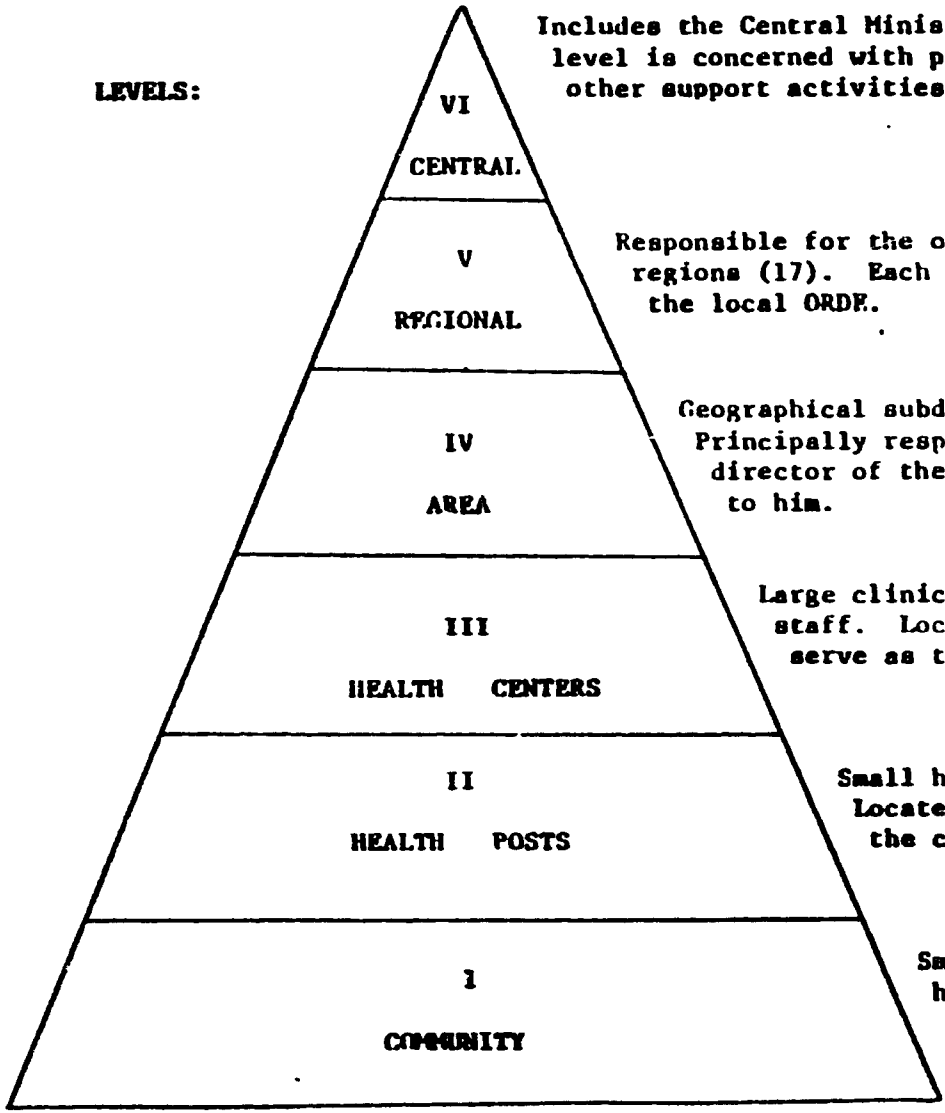
2. The Promoter's Place in the System*

The structure of the Peruvian Ministry of Health is the classic pyramidal organizational form ubiquitous in the developing world; it is presented here in Figure I-1. Primary health care services and the related support system are focused on the three lower levels:

a. Health Center. This is essentially a large clinic staffed with: a part- or full-time MD, one or more nurses or nurse-midwives (obstetriz); auxiliary staff, including nurse, pharmacist, statistician, and/or laboratory technician; occasionally a dentist; and some administrative and support staff. The physician is often a serum, that is, a graduate physician fulfilling a one-year mandatory social-service requirement following medical school. When no physicans are available, Centers are staffed by auxiliaries; nurses are rarely posted to this level in the absence of a staff physician. Health Center staffing is subject to the availability of budgeted positions as well as availability of personnel. Located in urban and peripherally urban areas serving relatively large population concentrations (20,000 - 50,000 people), the Centers are

* This section is based primarily on: Altobelli, 1983; Fairbanks, 1983; and USAID, June 1981.

FIGURE I-1. PUBLIC HEALTH CARE DELIVERY SYSTEM: Ministry of Health and Social Security



Includes the Central Ministry and specialized centers and research institutes. The central level is concerned with program development, management, coordination, evaluation, and other support activities for the other levels.

Responsible for the overall management and planning of defined geographical health regions (17). Each regional office has a director and support staff reporting to the local ORDE.

Geographical subdivision of the health regions, each of which has 1 to 4 areas. Principally responsible for implementation. By tradition, area director is also director of the largest hospital in the area, with other hospital reporting to him.

Large clinics staffed with part-time and full-time MD's, dentists, and other staff. Located in urban and semi-rural areas. Frequently, health centers serve as the link between the hospitals and the lower levels.

Small health delivery unit normally staffed by an auxiliary nurse. Located in semi-rural to rural communities. This is the link between the community and the rest of the system.

Smallest communities served by promotors and other community based health workers. Preventive services and some emergency care. Distribution of limited supplies.

intended to provide curative services to the immediately surrounding population and act as the direct supervisory and supply link with the Health Posts. The Health Center is, in theory, the lowest rung on the health-delivery pyramid where professional medical care is available. In practice, problems of inadequacy of physical plant, staffing, equipment and equipment functioning, and supply, weaken this rung seriously. The result is an artificial overloading of hospitals and under-utilization of Health Centers.

b. Health Post. This is the smallest fixed-facility unit which provides exclusively out-patient care and preventive services and is generally situated in semi-rural or rural areas in towns of 500 to 2,000 population. It is simply equipped and staffed by an auxiliary nurse or sanitarian (sanitario). The latter has basic training (about six months) which permits him/her to carry out simple curative procedures, some emergency care, and health and family planning education. The auxiliary is also responsible for supervising promoters at the community level and acting as the supply link in many cases. Only one to two percent of Health Posts are staffed by nurses, who find such assignments a sacrifice due to hardship living conditions, lack of prestige and peer recognition in the higher levels of the system, and a lack of financial incentives.*

c. Community. This is the smallest and lowest-level unit in the system. The community is served by local volunteer health workers, health promoters and trained traditional birth attendants (TBAs) who are supposed to deliver preventive, promotional, emergency and limited-curative care for common illnesses, and distribute some basic drugs and family planning supplies. They refer cases to higher levels of the system as necessary and are the theoretical point of entry into the formal health care system. The promoter stands at the frontier between the public health system and the community. That system has adopted as its working definition for that role the following:

> "(The health promoter) is a member of his or her community, elected in representative Assembly, to dedicate part of his or her time, after training, to activities in promotion, prevention, first aid, and simple health care" (Ministry of Health, April 1983).**

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* Opportunity for overtime pay (guardia) draws nurses from all lower levels of the system to urban hospitals.

** "Es un miembro de su comunidad, elegido por la Asamblea representativa para dedicar parte de su tiempo, previo adiestramiento, a actividades de promoción, prevención y primeros auxilios y atención simplificada de salud."

CHAPTER II. RESEARCH DESIGN AND METHODOLOGY

A. Evaluation Design and Strategy

1. The Evaluation Team

The evaluation strategy was predicated on a team composed of the following members: one anthropologist/team leader, one health economist, two medical anthropologists, and three paramedical trainers.* The team leader was present in-country over the 120-day life-of-contract; the other team members provided a total additional level of effort of approximately 12 person-months. To this level were added full-time bilingual secretarial support, the work of 50 local enumerators (auxiliares sanitarios selected by Hospital Area (AHA) staff and trained by team members), and 12 coders. The survey code-books were prepared by the team leader and data-processing was done by the Computer Center at the Universidad Católica of Lima.

2. Evaluation Design

The philosophy underlying the evaluation design was to use several different research techniques at different levels in the health delivery system, including the client component of that system, in as many sites as possible within the parameters of time and finances established by the contract. Each data-gathering method used was considered -- and employed -- both as a check on the quality of the others and as a way of enhancing the reliability and validity of the research as a whole (Naroll and Cohen, 1970; Brim and Spain, 1974; Pelto, 1970). The total design can be thought of as a sort of social-scientific triangulation.

The techniques used are presented, with detail on sample size, selection process, purpose, personnel used, instrument/methodology used, and limitations, in Table II-1.

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* See Appendix A for complete Scope of Work prepared by the USAID in coordination with representatives of the Peruvian Ministry of Health, Directorate of Maternal/Child Health and Population (DSMIP), and the Westinghouse Health Systems Advisory Team.

TITLE	1)* COMMUNITY SURVEY	2) PROMOTER SURVEY	3) TRAINING CASE STUDIES	4) TRAINING SURVEY, MOH	5) MOH SURVEY	6) CASE STUDIES
SAMPLE	48 communities/districts 50 households in each Total N = 2400	348*** promoters	3 ongoing promoter training courses****	no fewer than 16 Heads of Area Training Units and corresponding promoter trainers	N = 90+ MOH officials who influence the promoter program from each level of the MOH delivery pyramid	N=5 (3-6 requested in scope of work)
SELECTION PROCESS	a) purposive selection of Health Regions (N = 8) b) random selection of Hospital Areas (N = 16; 2 per Region) c) random selection of communities/districts (N = 48; 3 per Area, 6-8 per Region) d) random selection of households (50 per community/district, 150 per Area, 300 per Region, N = 2400)	random selection made after communities/ districts randomly selected during visits of team members to Health Regions	selection to be based on training courses under way during presence in-country of paramedical trainer	selection based on training courses under way and basic N of 16 Areas, since not all Areas had formal train-units established at the time of this evaluation	selection made from each level in sites visited; all sanitario-interviewers interviewed, using special open-ended questionnaire	selection made in consultation with Regional and/or Area staff and/ or sanitarios on basis of typicality
PURPOSE**	"To assess acceptability and cost of health promoter services, community participation in the program, and efficiency of the promoter selection process."	"To assess adequacy of training (especially under USAID projects 219 and 230 over the past two years), and adequacy of supervision, logistical support, information system requirements, continuing training needs, incentives, and overall MOH and community support " "To determine the adequacy of the training curriculum and trainer skills, as well as promoters' satisfaction and perception of their roles "	"To determine the adequacy of the training curriculum and training skills, [as well as promoters' satisfaction and perception of their roles].	"To determine regional variations and appropriateness of different approaches used, including in-service training and supervision."	"To determine managerial, administrative, and financial needs of the MOH to implement the promoter program."	"To present a more in-depth picture of community needs and promoter responses."
PERSONNEL PERFORMING TASK	58 auxiliares sanitarios trained as interviewers	58 auxiliares sanitarios trained as interviewers	paramedical trainer LeBow*	paramedical trainer LeBow anthropologists Enge and Davidson	paramedical trainer LeBow anthropologists Enge and Davidson	anthropologists Enge, Davidson, Harrison
INSTRUMENT/ METHODOLOGY	closed interview schedule, with some open-ended questions	closed interview schedule, with a greater number of open-ended questions	topical observation guide	topical interview guide	topical interview guide for physicians, nurses; sanitarios interview included 31 open-ended questions in the same topic areas	field observation guide, topical guide following general outline of promoter survey; duration 2-5 days
LIMITATIONS OF METHODOLOGY	standard limitations of surveys. validity controls through. emphasis on behavior and knowledge, promoter questionnaire, case studies. random review of questionnaires before payment made. possible sanitario bias eliminated by assignment out of customary zone of responsibility	same as for community survey	limited number of observations due to lack of on-going training during evaluation period	no major limitations	no major limitations	time

TABLE II-1. RESEARCH DESIGN

As seen in the table above, there were six instruments used:

1) Community survey
2) Promoter survey
3) Training case studies
4) Training survey, MOH
5) MOH survey
6) Case studies.

The sizes of the samples vary upward and downward from the Scope of Work only slightly. Variations were opportunistic and originated in realities of time, distance, weather and, in the case of the training studies, in response to regional training schedules. All instruments are included in Appendix C-G. A list of participants in this evaluation is presented in Appendix B.

3. Sampling Procedure

A major methodological issue was the selection of sites; the Scope of Work stipulated "as many as possible, but not less than eight" of the country's 17 Health Regions. The number of evaluation or research questions that can be asked and the number of places they can be asked depend largely on the time, money, and human resources available; they are also functions of distance (Peru is large), ease of travel (quite variable), and weather (this evaluation began in the rainy season). Evaluations are also affected by political considerations since they are, by virtue of their nature and goals, oriented toward issues of policy; they must also account for client commitments and concerns, as long as those do not prejudice the integrity of the study.

Consultation among the MSH team, AID/HNE, and MOH/DSMIP produced consensus on a purposive selection of Health Regions, to be followed by random selection of Hospital Areas, communities or districts, and households. The following regions were eliminated a priori for the reasons noted parenthetically: Ayacucho (terrorist activities), Loreto (great size, low population density, and corresponding logistical problems), and Madre de Dios (little or no promoter training). The following regions were explicitly selected a priori for the reasons noted parenthetically: Ica (site of the AID-funded Sur Medio model maternal/child health and population project) and Puno (the region with the deepest history of use of health promoters). Given these eliminations and pre-selections, the decision was made to select the remainder of the regions on the basis of their geographical and ecological representativeness, according to the model presented in Table II-2. Coverage on all nine cells was not possible, due to time limitations, but ecological coverage was achieved by the inclusion of Huánuco, a region which has both high and low jungle. Urban Lima was excluded because the task profile of promoters in that context is quite different from that of rural areas. Calculations of available time made it clear that research in 25 Hospital Areas would be impossible; agreement was reached to work in 16 Areas, two in each of the eight regions selected, a number which represents one-quarter of the total universe of AHAs (N=66).

TABLE II-2. HEALTH REGION SITE SELECTION

Regions	coast	highlands (sierra)	jungle
north	Piura-Tumbes	Arequipa	San Martín (high jungle)
central	Callao	Ancash	Huánuco (high & low jungle)
south	Ica	Puno	----------

In each Region, two Hospital Areas were selected randomly. Within each such Area, six to eight communities/districts were selected, also randomly, by team members making preliminary preparatory visits to each Regional Office; unfeasible sites (e.g., at over five hours' distance) were deselected beforehand. (A complete site list is presented in Appendix H.) Following the site selections, random selection was made of three to four sanitarios working in each Area, for a total of six to eight per Region. The basic number of six was meant to provide a minimum sample size of 48 communities/districts, with the extras intended to provide a reserve pool of both interviewers and questionnaires as insurance against dropouts, trainee failure, error, and the implacable workings of Murphy's Law.

Each sanitario-interviewer was trained (see below) and instructed during training a) to work outside his/her assigned, regular radius of program responsibility to eliminate possible bias and b) to interview no fewer than six promoters in the zone assigned. Of these, no fewer than four were to be actively working and two not presently working; if inactive promoters could not be found, then the sanitario-interviewer was permitted to substitute with active workers. Each interviewer was also instructed to randomly select and interview 50 households in the community/district assigned, for a total of 150 households per Hospital Area and 2,400 for the study as a whole. In other words, each sanitario-interviewer who completed training successfully (N=58) would carry out 56 interviews in all, 50 at the household level and 6 with active and inactive promoters. Actual number of completed household questionnaires was 2,345 out of a possible 2,900; actual number of completed promoter questionnaires was 284 out of a possible 300. Selection of promoters for subsequent case studies was made purposively; the goal was to do these studies with promoters identified by Regional or Area staff or by sanitarios as being typical, rather than as exceptional in either a positive or negative way.

* See Table II-3 for population sizes of promoters' communities.

TABLE II-3

POPULATION OF PROMOTER COMMUNITIES, BY REGION

	Number of Promoters in communities with populations of:					
	under 500	500-1000	1000-1500	1500-2000	over 2000	Row Total
Piura-Tumbes	5	5	8	4	11	33 (11.7%)
San martin	30	1	0	3	1	35 (12.4%)
Huanuco	17	4	0	8	6	35 (12.4%)
Callao	24	2	2	9	3	40 (14.1%)
Ica	7	4	12	4	9	36 (12.7%)
Arequipa	11	4	2	5	9	31 (11.0%)
Puno	14	5	4	13	7	43 (15.2%)
Ancash	17	7	0	3	3	30 (10.6%)
Column Total	125 (44.2%)	32 (11.3%)	28 (9.9%)	49 (17.3%)	49 (17.3%)	283 (100.0%)

FIGURE II-1. MAP OF PERU

4. Interviewer Training

The Interviewer Training Plan is presented in its entirety in Appendix I, together with a detailed account of a typical training procedure and associated budget. The training period in each Region consisted of two 8-1/2 hour days and was based primarily on practicum.

5. Data Processing

After the completion of both promoter and community interviews, content analyses were performed to define categories for codification prior to the data analysis. A coding system was designed to represent as many distinctions as possible, including multiple responses to questions with up to 14 value choices. In such cases 14 variables were created and resulted in large numbers of variables for both questionnaires. The promoter questionnaire generated 474 variables and the community questionnaire 207. Copies of both code books have been included in Volume II. The coding was performed by twelve social work students on 80-column IBM forms, which were then photocopied. Completed code sheets were brought to the Centro de Computación at the Universidad Católica del Perú.

The Centro de Computación has a multi-terminal interactive IBM 4331 system equipped with the latest version of SPSSX. The data from the code sheets were entered onto discs, verified for accuracy, and frequencies were run on both data sets. Codes for non-applicable questions and non-responses were set to missing values; distance, theme, and activity-sequence variables were grouped and recorded. Cross-tabulations were then run, disaggregating frequencies by the eight health regions in our sample. All financial data, consisting of ratio-level variables, were subjected to breakdown procedures crossing monetary quantities by region and sex. Variables created by multiple-answer questions were recoded to dichotomies and reaggregated using the Multi-Response Program.

All other interviews and the case studies were tabulated and content-analyzed by members of the team.

B. Organization of This Report

This report is organized into eight chapters. Chapter I is a standard introduction. Chapter II contains the research design and methodology, and a description of the organization of the report. Chapter III presents the findings of institutional (MOH) interviews at various levels of the public health sector, and the findings of the training evaluation. Chapter IV presents the findings of the promoter and community surveys, structured according to the elements stipulated in the Scope of Work. Chapter V is composed of paramedical case studies in four regions and a condensed version of one anthropological case study.* Chapter VI is an analysis of the financial context in which the promoter program is set and must function. Chapter VII is an analytical summary of selected findings, and Chapter VIII offers a list of recommendations.

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* The balance of the case studies are in the Appendices, to reduce the bulk of an already lengthy document.

CHAPTER III. THE INSTITUTION AND THE PROMOTER

A. Institutional Perceptions

Over 90 interviews of Ministry of Health personnel were carried out in the Health Regions and Hospital Areas included in the basic sample. This set of interviews responded to the component of the Scope of Work which requested "a survey of MOH officials who influence the promoter program from each level of the MOH (Central, Regional, Hospital Area, Health Center, Health Post, Community) to determine managerial administrative, and financial needs of the MOH to implement the program." This component was partially combined, largely for logistical reasons but also for reasons of substance, with the component of the Scope of Work that requested "a survey of at least 25 Jefes de Area Hospitalaria/ Unidades de Capacitación and the corresponding trainers to determine regional variations and appropriateness of different approaches used, including in-service training and supervision."*

Representatives from the higher levels of the health pyramid were physicians, directors, or sub-directors of Regions, Hospital Areas, and Health Centers (N=12). The middle levels were represented by head nurses from the Regions and Hospital Areas who were in charge of promoter training and supervisory personnel (N=15); interviews at the next lower level consisted of nursing personnel directly involved in promoter training and re-training, and active participants in promoter training (N=16). Personnel interviewed from the lowest levels were técnicos sanitarios ** and auxiliares de enfermería (N=50). In total, 93 institutional interviews were conducted.

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* Because the majority of the Regions included in the sample have not yet formally filled the Jefe de Capacitacion slot, the paramedical trainer primarily responsible for this component interviewed all individuals responsible for training. In some cases, visits related to the training evaluation were combined with general MOH interviews and some MOH interview visits concerned themselves with gathering ancillary training data. The numbers of doctors and nurses interviewed almost double when the shorter, training-related interviews are included.

** Until recently, the term in most common use for this role was "auxiliar sanitario"; an attempt is being made now to use the term "técnico sanitario." The term in everyday use is simply "sanitario" and we will use that here.

The interview instrument used for the physicians and nurses was an outline of topics to be covered in a broad, open-ended, conversational session of at least one hour's duration (see Appendix E). The sanitario interview (see Appendix F) was more structured and consisted of 31 open-ended questions within the same topical areas. These open-ended questions included, but were not limited to: promoter role focus and content, selection process and criteria, different aspects of systems support (training, supervision, logistics, compensation and other incentives), nature of relationships with the MOH and the community, promoter impact, problems (desertion, community needs and demands), and perceptions of promoter potential.

The physicians' responses were, as a group, relatively consistent. In consequence, we have chosen to present the results of those interviews as a single narrative, following the outline of topics, without attempting to deal with numbers and percentages, whose utility in a relatively small sample is dubious in any case. Important exceptions and differences of opinion are noted, while the anonymity of dissenting respondents has been maintained. The nurses' interviews are handled similarly. In contrast, the sanitario interviews (N=50) were tabulated and the results are presented in semi-quantitative form.

Finally, the reader is advised that all interviews not only covered the same topics but did so in approximately the same sequence. The variance in emphasis that emerged came from the varying degrees of contact and involvement with promoters which is characteristic for each service level; doctors, who have less direct contact with promoters than any of the groups interviewed, quite naturally display different priorities and concerns than do sanitarios. For easier comparison, the results from the interviews at each level -- physicians, nurse supervisors and trainers, and sanitarios -- are presented below following the same topical outline. A summary of results is presented at the end of this chapter.

1. Physicians (N=12)

a. Promoter Role Focus and Content

With only one notable exception, the physicians interviewed perceive the promoter as an individual who should work primarily in preventive and educational activities, be only marginally involved with curative medicine, and be trained to refer all cases requiring medical care to Health Centers and hospitals. Some see the promoter as an individual who should be critical in the coordination of community development activities, nutritional projects (primarily feeding projects), the monitoring of the incidence of infectious disease, and support for vaccination campaigns.

The promoter is also seen as a potentially crucial change agent. Physicians generally feel that, through health lectures (charlas), promoters could induce behavioral change leading to improved health. The boiling of water, proper personal hygiene, and environmental sanitation were often mentioned as important examples of such preventive activity. Several respondents added that this order of activity should be geared to problems specific to each ecological zone; such suggestions referred mainly to broad ecological zones (coast, highland, jungle), rather than to epidemiologically-described areas.

Promoters were perceived as important contributors to improved nutritional status. Favorable reference was made to promoter work with family and community gardens and there was some enthusiasm for promoter-led projects which combined gardens and small animal husbandry. This was seen as one of the few ways to produce positive changes in carbohydrate-high, vitamin-low traditional diets which are dictated by the enduring interaction among poverty, technology, and custom.

Physicians also saw a major role for promoters in the control of infectious diseases. In their view, promoters should be taught the symptoms and courses of the major infectious diseases endemic to their areas, how to track spikes in incidence, and how to refer patients for treatment and notify higher levels of care about actual or incipient outbreaks. Beyond this, promoters should also be taught to teach ways to minimize contagion. Another dimension of this activity should be participation in vaccination campaigns, seen as one of the most important of all promoter activities and as a key to increased epidemiological and general systems coverage. Many respondents pointed out that communities that are properly prepared and informed will be ready and waiting when MOH vaccination teams arrive. One physician felt that promoters should be taught to frankly address the possibility of adverse reactions and explain their manifestations and management, in the belief that people will continue to have their children vaccinated if they expect, understand, and can handle possible side-effects.

Most of the respondents in this group saw a suitable, additional diagnostic role for promoters in malarious and tuberculosis-endemic zones. Promoters should be taught how to make the thick smear (gota gruesa) for malaria identification and sputum slides for TBC diagnosis, how to send the slides to the nearest appropriate MOH facility for staining and microscopic examination, and how to translate notification of positive cases into patient referrals for treatment.

Very few physicians thought the promoters had a significant role to play in maternal/child health, which comes as something of a surprise. The feeling was that the extent of promoter MCH activities should be limited to identification and referral of expectant mothers and to the referral of all newborns to Health Centers for well-baby care and birth registration. The reason for this was that MCH activities in general, including referrals, were the province of the trained TBA; even in the absence of such an individual, physicians did not seem to see MCH activities as proper components of the promoter role.

Physicians, as might be expected, were fairly precise about what they thought should be the parameters of the promoter's role with regard to first aid treatment. For lacerations, promoters should stop bleeding, apply antiseptics, and refer the patient to the nearest health facility where appropriate care was available. Broken bones should be immobilized, splinted and, again, the patient referred. Promoters in jungle areas should be taught how to provide emergency treatment for snake and poisonous insect bites.

Physicians were similarly precise about the promoter's role in the treatment of illness. He or she should be able to prepare and use both packaged oral rehydration salts (ORS) and rehydration preparations made at home (sueros caseros) according to correct formulae. Some respondents felt that promoters should be taught to give relevant dietary advice,

but most felt that cases of diarrhea that did not improve quickly should be referred to higher levels of treatment for more sophisticated care, i.e., rehydration by mechanical means. Treatment of other illnesses should be limited to the administration of antipyrrhetics, antibiotics in tablet or capsule form, topical and optic antibiotics, and little else.

As a group and almost to a man, the physicians felt that the promoter's pharmaceutical kit should be limited to very basic and "safe" medications; the use of stronger drugs should be limited to physician's prescription. Two respondents, in fact, felt that promoters should neither administer antibiotics nor give injections of any kind. About half the group acknowledged that, in reality, promoters were already using a wide range of pharmaceuticals and giving intra-muscular and even intravenous injections; they continued to feel, nevertheless, that such activities put patients in jeopardy. One respondent from the southern sierra commented that it was fortunate that, for some apparently genetic reason, allergies to penicillin were infrequent in the Peruvian population.

In contrast with the majority consensus on the necessity for preventive/educational emphasis in the promoter role, one regional sub-director cast a lone dissenting vote. He was convinced that the promoter role should be first of all curative and only secondarily preventive. His rationale was that most communities, particularly rural communities and particularly the most remote rural communities, want, hope for, and may even expect curative medicine. If the promoter is unable to provide even a reasonable minimum of such attention, the community and, ultimately, the promoter, will be frustrated and unsatisfied. Beyond this, this respondent believed that it was improbable that prevention, promotion, and community development could occur in any meaningful, durable way unless the minimal expectations for treatment were met at the community level. Correspondingly, in order to meet community expectations, promoters should be trained in diagnosis of the most important illnesses and in the use of medicines, including injectables. To support this, communities should have available a fairly wide range of basic medicines at reasonable prices for promoters to administer. The best way to accomplish this was to establish community pharmacies (botiquines comunales), managed by the promoter and paid for by community residents. None of the other physicians interviewed had any opinions on the advantages or disadvantages of community pharmacies per se.

The lone dissenter went on to say: 1) that the main impediment to promoters' potential for doing basic curative medicine is the medical establishment itself, and 2) that 50% of health problems in Peru derive from malnutrition, which could be ameliorated by the cultivation of regionally-adapted foods and small animal husbandry. The properly trained promoter could be crucial in teaching communities these skills and should do so in coordination with the Ministry of Agriculture.

b. Selection Process and Criteria

The physician respondents generally agreed that promoters should be native or long-term residents of the comunities where they are

to work, be able to read and write, be accepted by the community, and be willing to work hard. Most said that males made better promoters: men are able to take care of emergencies at any hour and travel farther faster. A few stated that either sex would be fine and one said that women would be better because they command more confidence on the part of local residents. The sample was evenly split on the subject of ideal age; those who preferred young promoters noted, however, their tendency to migrate. Those who preferred older promoters were rather emphatic on the qualities of stability and maturity. There was no correlation between the ages of the physicians themselves and their preferences in this regard.

The position of this group on the potential for traditional health practitioners (THPs*) to become promoters was quite flexible. Their perspective was that such individuals would be an asset to the system if they could be trained, mainly because of their knowledge of herbal medicines which are, in Peru, assigned considerable scientific value.** Still, the physicians were pessimistic about the literacy levels of most THPs and about the extent of their interest in being incorporated into the public health service.***

There was broad agreement that the promoter selection process should be predicated on community consensus, especially when a choice needed to be made among several well-qualified and willing candidates. A few felt that the entire selection process should be left to the community; others felt that the Ministry of Health should have some say. One rather idiosyncratic view was that community leaders should select relatives as promoters, even if they failed to fulfill other prerequisites, for no other reason than their access or proximity to the community power base.

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* For economy's sake, we will refer in this document to traditional health practitioners as "THPs."

** Peru is distinctive among its Latin American and North American colleagues in the hemispheric health community, in the regard it bestows not only on the psychological benefits of traditional medicine, but in its interest in the therapeutic properties of traditional medicines themselves.

*** Davidson (1983) found that an average of 61% of a sample of 250 trained midwives (TBAs) was literate, with a range from 41% (Lambayeque) to 74% (Ica), a surprisingly high percentage for a group usually considered to be functionally illiterate. Since literacy levels in developing countries are customarily higher among males than females, the assumption that "most" curanderos are illiterate may be misguided.

At the same time, there is a real question about how interested traditional healers are in becoming part of the modern health establishment, even as that establishment in some places increasingly woos them (Chapin, 1981, personal communication; Cosminsky, 1976; Harrison, 1978; Landy, 1977).

c. Systems Support

Training and Re-Training

The physicians interviewed were not, as a group, either well informed or particularly interested in the details of promoter training. Two mentioned the lack in the Ministry of Health of the sorts of trainer skills that were needed for this activity; at the same time, there was unanimous agreement on the need for re-training for continuing promoters, ranging from once every three months to once a year. The main justification for this rather high frequency of re-training was that physicians thought promoters had problems remembering what they had been taught and thus required constant reinforcement. There was a minority view, detailed below in the discussion of the desertion problem, that it did not pay to invest too much time or money in training any one promoter group; because of high desertion rates, it made more economic sense to train them at minimal preventive levels.

Supervision

For similar reasons, physicians felt that promoters, once trained and at work in their communities, required almost constant supervision. Ironically, one respondent -- and analysis of actual expenditures on supervision in other areas strongly suggests that he is far from unique -- stated flatly that he allocated no money for any kind of supervision because other needs, e.g., maintenance and operation of the hospital laundry, had higher priority. The concept of supervision shared by most of the physicians is checking to be sure that promoters are giving health talks on the prescribed set of topics. This is consistent with their perception of the promoter's essentially preventive role but not very consistent with their apprehensions about promoter abilities; consistency in this regard would logically require that supervision include checking on promoter accuracy in diagnosis, knowledge of appropriate dosages for basic medicines, and quality of first aid skills. The concept of supervision as a dimension of retraining was completely absent.

Logistics and Supply

The physicians as a group and as individuals were rather contradictory in their attitudes about issues of logistics. Most complained about the lack of gasoline, vehicles, and per diem funds in a general way, but did not seem to link this in causal fashion with problems of supervision, perhaps because of their ambivalence about the priority of supervision relative to regional and area head-quarters needs. There was a somewhat startling and puzzling nonchalance about supply problems, incuding lack of medicines at the community level. Physicians seem to assume that community residents can invariably find prescribed medicines, if not at Health Centers or local hospitals, then at local pharmacies. There seems to be little sensitivity to matters of client expenditures of time and money. Only the same lone dissenter, referred to earlier, differed on the subject of availability of medicines; his assumption was that such availability was virtually nil.

Compensation

Most of the physicians interviewed felt that promoters should get some form of remuneration. None, however, saw this as a regular salary; it was viewed more as a stipend (estipendio) or incentive (incentivo). There was no consensus on what the level of such remuneration should be. One respondent thought that it could not really be a monetary incentive, in the light of MOH budgetary realities, and suggested that promoters be given seeds, tools, uniforms, and some means of transportation such as bicycles where those were feasible. In one Region where there is an active Promoter Association, one physician observed that if the promoters were to get even a stipend, they would subsequently organize strikes for periodic raises; furthermore, remuneration would lead to intense competition among promoters and between promoters and auxiliary nurses and sanitarios. Finally, even small salaries would dilute the principle of voluntary service to the community.

At the same time, none of the physicians were prepared to deny to the promoter the right to charge for medicines and services and there was general recognition that this was already standard practice. Any such charges, nevertheless, would be modest and adjusted to client ability to pay; markups would be permitted to allow for re-stocking and a small margin of profit to the promoter.

Relations with the Public Health System and the Community

Perhaps not unrelated to the issue of salaries is the view, shared by the physician interviewees, that promoters are not an integral part of the public health delivery system, but rather an intermediary between that system and the community. The promoter's real work is to help, support, and refer patients to that system; his ability to perform those functions is based ideally and primarily on community support rather than on health system support. In areas where promoter selection has involved active community participation, if not the direct control of community leaders, there is agreement among the public health doctors interviewed (if these are representative) that continuing community support and participation are greater, e.g., there is better attendance at preventive talks. Such participation is perceived, in fact, as the only way to guarantee sustained promoter activity, and the lack of it is seen as a major contributor to promoter desertion. There is not the same view of MOH support; the distinction is a crucial one.

Promoter Impact and Contributions to Health Care

There was no clearly shared set of opinions on promoter effectiveness or impact, nor did any single physician offer a well-articulated statement of how that might be defined and measured. Comments on promoter impact were basically hypothetical; in the absence of explicitly-gathered baseline data, monitoring, or ex-post evaluation, such assessment is difficult at best, if not impossible. A couple of respondents theorized that, as the only source of modern health care in remote areas, promoters would have to have some impact on local health status, a sort of "impact by default."

Problems

The principal problem identified in promoter programs was the high rate of desertion and the perceived corresponding continual need to train more promoters. Physicians attributed high desertion rates primarily to lack of remuneration, followed by emigration. The preferred solution was to keep promoter training programs as short as possible in order to minimize investment and maintain some savings for training replacements; promoter activities are conceived of as temporary phases in people's lives rather than as any kind of career or step on a career path. Only one physician thought of promoter work as a possible entry to further paramedical training, although others in the group were aware that some promoters did think of the role in this way; nevertheless, this perception was dismissed as unrealistic, since promoters as a group cannot, it is believed, meet the educational requirements for further training.

2. Regional, Hospital Area (AHA), and Health Center Supervisors and Trainers (N = 31)

This group consisted of 31 promoter supervisors and trainers from the Health Regions, Hospital Areas, and Health Centers contained in the eight-Region sample. All were nurses with experience in working with promoters, ranging in duration from eight years to six months of experience. It is thought-provoking that the ideas offered by nurses were more varied and more flexible than those offered by the physicians interviewed. Because of this, and because the nurses as a group had far greater first-hand experience with promoters, the findings from this group were both more detailed and more extensive.

a. Promoter Role Focus and Content

This group of interviewees agreed, without exception, that the primary role of the health promoter is a preventive one. As such, it should be predicated on the giving of educational talks, participation in community development projects, collaboration with vaccination campaigns, identification of health risks, and assistance in the improvement of nutritional levels, particularly in young children and pregnant and lactating women. A second component of the promoter role, and subsidiary to prevention, was the performance of very basic curative procedures such as first aid, wound dressings, rehydration for simple diarrheas, and the management of uncomplicated respiratory disorders, including the common cold. The medicines to be used by promoters in implementing this curative dimension of their role should be limited to analgesics, antipyrrhetics, anti-diarrheals, and antibiotics, all for oral administration only. Any condition requiring more complex treatment should be referred to the nearest medical facility, hospital, Health Center, or Health Post, depending on the degree of gravity.

An important distinction in this general formulation was made by one supervisor in Pucallpa, who felt that the promoter role should take into account the important variable of distance. Promoters based in communities more than a day's travel away from a fixed facility should receive additional curative training and be taught to use a wider range of medications, including injectables. Two other respondents also alluded to the advisability of increased training for promoters in more remote and inaccessible areas, without stipulating where the cutoff point should be. The distinction may constitute an important training criterion, as well as a possible standard feature for national and/or regional norms.

With the exceptions of the nurses who saw distance as a plausible discriminating variable, all the nurses felt that the medicines managed by the promoter should be for oral administration only. The special case in which a majority of the respondents agreed that this restriction should not apply was the management of cases of tuberculosis, which requires that such drugs as streptomycin be injected regularly over a long period of time; patient compliance and completion of therapy virtually demand the participation of a promoter-like person in areas at a distance from a fixed facility which would constitute a barrier to cure. Some of the nurses felt that a promoter could also be authorized to inject other drugs prescribed by medical personnel at higher levels in the system. Respondents in this group from almost all regions acknowledged that many promoters were, in fact, already practicing more complex curative medicine and using rather potent drugs purchased in local pharmacies; like doctors, they voiced concern about the potential for allergic reactions associated with such use.

Despite their shared and emphatic commitment to the dominance of prevention in the promoter role, the nurses went to great lengths to explain the need for good training of promoters in first aid procedures. This was particularly the case in jungle areas where a high incidence of lacerations, snake and insect bites, and accidents was seen as endemic. Prompt and appropriate interventions by a well-trained promoter could avert severe and even life-threatening infections and, not improbably, fatalities. In fact, promoters in Tarapoto and Pucallpa are presently being encouraged to use what are apparently very effective herbal therapies for poisonous bites. Two justifications are offered for this approach: one, that continuance in the use of traditional remedies is congenial with the persistence of strong traditional medical beliefs; the other, that Peru, as a poor country, cannot yet afford widespread use of expensive modern pharmaceutical solutions.

Finally, nurses agreed that an appropriate third component of the promoter role is the dissemination of family planning information and referral of couples to health facilities for delivery of methods. One nurse, from Tarapoto, said: "People simply don't want any more children. Many couples come to the Health Centers, referred by promoters who have given talks on the importance and availability of family

planning methods." The Catholic Church in Puno is also said to actively encourage the use of artificial birth control measures. At the same time, none of the nurses thought that promoters should have the responsibility for delivery of any birth control methods other than condoms.

In summary, the majority view of the nurses interviewed at different levels of the health delivery system was that the role of the health promoter consists of prevention, health education, collaboration, and simple medical treatment. In this role, the promoter is viewed as the "key person" (persona clave) positioned between the community and the formal health delivery system. As such, he must satisfy local demands for curative medicine, make referrals, and cover a wide range of preventive activities. This seemingly straightforward role profile was, nevertheless, qualified by a fairly elaborate set of rather fine discriminators.

b. Selection Process and Criteria

Perhaps as a reflection of this complexity, there was solid general agreement on some of the selection criteria for promoters and sharp division about others. There was consensus that promoters should be: native residents, enthusiastic, willing to work, in good health, literate, married with family, and with a regular income. The areas of disagreement were: sex, selection process, and background as traditional practitioner.

The preference for male or female promoters was fairly evenly divided. The advantage of male promoters was attributed, as it was by physicians and sanitarios, to their being able to travel and go out at night with fewer inhibitions. The advantage of female promoters was attributed to higher levels of confidence; a preference by female clients to be examined by women; and, in the case of Pucallpa, to the long absences by men who go to work as loggers, which make them correspondingly unavailable for promoter work. (This same factor, although it was not noted by this group of respondents, applies as well in many other regions of Peru where men migrate seasonally, especially for harvest work.) A thought-provoking solution to all these limitations was suggested, independently, by respondents in Huanuco, Tarapoto, and Puno: that one promoter of each sex be trained in each community. Each promoter would tend to sex-specific illnesses and health needs and work in preventive activities, e.g., men with potable water systems and latrine construction and women with maternal/child health and domestic hygiene.*

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* The suggestion was made by Ministry of Health representatives interviewed in Pucallpa that the training of couples as promoters might be a good idea. The Pucallpa case study, in fact, found a couple, a sanitario and his wife, who participated jointly in birth deliveries.

Although mentioned in other regions, in Tarapoto there was solid consensus about the locus of the selection process and the appropriate pool of recruits: respondents unanimously agreed that promoters should be chosen from the universe of community leaders or their close relatives. The theory behind this is that promoters from this group will have fewer problems of attendance at meetings and educational talks and greater likelihood of eliciting community support and participation, since they already command a following of their own or have the necessary leverage that comes from kinship and compadrazgo* relationships. Respondents in general were in agreement that promoter candidates should be approved by a vote in the community assembly (Asamblea Comunal), and there seems to be a belief that this is a democratic process.**

Respondents were very much in accord that the Ministry of Health should not be involved in the actual selection process, although criteria such as educational level, community of origin, and length of residence originate in Ministry norms. The feeling was that the entire selection procedure should be left to the community; it was not clear how the criteria for selection were to be conveyed to the community or, once conveyed, how they would be sustained in the community memory for any subsequent selections, or how the Ministry could ascertain in any consistent way whether its criteria had been met. No one thought that the sanitario, the person in the public health system with whom the promoter works most closely, should be involved in promoter selection.

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* The system of fictive kinship, roughly equivalent to "godparenthood," which establishes, through baptism of children, a set of relationships characterized by mutual trust and mutual obligations of different sorts.

** In reality, community assemblies are often rubber-stamp events; approval or disapproval of proposals presented by community leadership is by voice vote and it is unusual in such a forum for individuals to openly present opposition, in this instance to a proposed candidate for health promoter. If more than one candidate is presented to the assembly for selection, that body does indeed vote, but there is some indication that the triumphant candidate is generally either the one with the most influence or the one who commands the support of the community leadership, which can then proceed to influence the voting. Beyond this, it appears that attendance at community assemblies is frequently quite low; although all community residents are supposed to attend, this is rarely the case. This is not meant to suggest that the selection of promoters is somehow dishonest, only that it reflects the realities of distribution of power in rural communities which diverge somewhat from romantic ideas about the functioning of the democratic process.

The nurses as a group were ambivalent about the suitability of training traditional practitioners as promoters. Like doctors, they all felt that it was a good idea in theory, but made problematical in practice by the supposed endemic illiteracy among curanderos and yerbateros, as well as by supposed lack of interest, since curanderos have long-standing, established positions of power and prestige in their communities and therefore are little disposed toward change. On the other hand, many of the nurses thought that the influential position and confidence enjoyed by curanderos could be an important asset in the sorts of rural health activities carried out by promoters; there was also some awareness that campesinos not infrequently preferred to seek the help of a curandero before resorting to the promoter.

c. System Support

Training and Re-Training

Three-fourths of the nurses interviewed said that promoter training courses were, by necessity, done on a shoestring budget. Very few such courses use professional or "trained" trainers; most rely on personnel from Regional headquarters, Hospital Areas, and/or Health Centers, who effectively function on a volunteer basis since there are no special remunerations for such training activities. Most of these trainers receive no extra salary for acting as such and, in fact, are usually scheduled to teach during working hours; this both eliminates the need to pay overtime and competes with regular duties. The reality is that the nurses in charge do work many extra hours to be able to encompass training needs and receive no additional pay. A majority of the training courses and some refresher courses do cover student expenses but the amounts, if at one time realistic, have been deteriorated by inflation to unrealistically low levels. These limitations are exacerbated by the tardiness of funds sent from the MOH central office in Lima and lack of responsiveness to repeated pleas from regional offices for speedier disbursements. There were also complaints about the lack of teaching equipment and material -- slide projectors, charts, paper, etc. -- although there are budget line items for these.

Respondents were divided on the subject of the optimal duration of training. The majority, who favored shorter courses, did so because of high promoter desertion rates which, in their view, made major investments in training ultimately wasteful. Those in the minority felt that courses shorter than 30 days were neither long enough for students to acquire adequate information, retain it, or practice it; the increasing desire of trainees to learn more about curative medicine, to learn to diagnose, administer medicines, and perform injections, at a time when MOH policy is shifting toward a more preventive emphasis, complicates the whole issue of duration in important ways which were not clearly articulated by the nurses but were sensed, nevertheless.

In contrast to high post-training dropout rates, respondents' estimate of dropout rates during training are quite low; only very rarely did trainees leave training for personal reasons or because they were dismissed for low grades. Some of the nurses felt this was because of

the incentive of the per diem; others felt that trainers were simply not disposed to give failing grades. It was generally agreed that many, if not most, students had a hard time at the beginning of a training course and required a lot of help, largely because the educational base for most of them was a primary education completed some years ago. At the same time, most training courses enjoyed a significant percentage of very bright and highly motivated students, eager to learn and particularly eager to learn curative medicine. The nurses felt that all students, even the best, profited by refresher courses, although they disagreed on the question of optimal frequency, duration, and content. As before, the lack of adequate and timely funds impaired the re-training process.

Supervision

There was unanimous accord among the nurses interviewed that frequent promoter supervision was necessary. The perceived purpose of such supervision was threefold: to collect information, check on how well the promoter was performing, and identify future training needs. There was also a widely shared conviction that if promoters were not adequately supervised, they would effectively stop their preventive, promotional, and educational activities, and confine themselves to the delivery of curative medicine The implication of this conviction was that neither promoter nor community commitment to preventive medicine is deeply rooted enough to endure more or less on its own.

There was similarly unanimous accord on the chronic lack of funds for transportation and per diems which make supervisory activities infrequent and erratic; "once a year" was not an unusual response. Some examples of different responses to these virtually universal limitations follow:

- In such low jungle areas as Pucallpa, which are united almost totally by waterways and where river transportation is very expensive, supervision is rare.
- In Juli, only indirect supervision is possible most of the time and is predicated on the submission of monthly reports by promoters; direct supervision occurs only when it can be combined with vaccination campaigns or on the sparse occcasions when multidisciplinary teams go out on community diagnostic visits, both situations where supervision is an ancillary activity compromised by limited time and competing demands. - In Puno, supervision visits are, in some instances, paid for by communities themselves.
- In Tarapoto, a dual supervisory system (sistema dual) has been designed which is based on the assumption that promoters will not turn in monthly reports unless they receive supervisory visits from the sanitario at the nearest health post responsible for them; the sanitario also turns in a monthly report which includes data on promoter performance. The next echelon of supervisory personnel thus has two perspectives on promoter performance and material utilization. Furthermore, to assure compliance, sanitarios receive their monthly salary only when these reports have been submitted. However, in the absence of adequate funds to pay per diems to sanitarios for bringing in their reports, they are no longer penalized for not doing so. The result has been a drastic decrease in both sanitario and promoter reporting.

In sum, there is little disagreement at the philosophical level about the importance of supervision. Nevertheless, despite this stated consensus, the fact is that little is going on in the area of supervision in almost all of the areas visited, at least according to this group of informants. The reasons given for this state of affairs are primarily financial and logistical. Still, there are some nagging questions, to be explored in more detail in subsequent chapters, about how much promoter supervision would really emanate from service levels above the health post, even if the necessary funds were to become available. Given the discomforts of back-country travel, the distances to be travelled, the time available to spend on each outreach worker, the variability and elusiveness of promoter role performance, and the questionable condition of the related information system, it is not clear that money is the only impediment to the realization of supervision.

Logistics and Supply

All promoter training programs with which the evaluation team came in contact directly or indirectly include plans to provide graduate trainees with a small startup supply of equipment, curative materials, medicines and, in some cases, a bicycle. An underlying assumption for the basic medical supply was that sales of medicines, which would include some small markup, would be used for re-stocking. The intention in most regions visited was that the promoter would be able to make drug purchases in Health Centers and/or Area Hospitals. However, inadequate or non-existent supplies have almost decimated this plan and, as a result, promoters make their drug and materials re-stock purchases at local pharmacies. There are two major negative spinoffs from this situation: i) prices to consumers may vary wildly and ii) there can be little, if any, supervisory control over the medications which the promoter dispenses. As for other materials, such as cotton, tape, gauze, soap, and the like, not to mention bicycles, these typically arrive late, partially, or not at all. One supervisor in Pucallpa commented that the equipment and medicines included as part of the AID-supported training activity were too elaborate and in some ways inappropriate for the medical realities of the low jungle; in all other areas, however, interviewees would have been grateful for anything.

Compensation

With very few exceptions, the supervisory and training personnel interviewed at all levels felt that promoters should receive some sort of compensation. In all cases, they thought that such compensation should be nominal; a frequently suggested figure was something on the order of 20,000 to 30,000 soles per month, to be provided by the Ministry of Health. A few of these individuals ventured that the communities involved should also make some additional, supplementary, regular contribution to promoter salaries, the amount to depend on the promoter's level of effort. The dissenters felt that any promoter remuneration would have to be generated by the community, since the MOH simply could not, because of its stressed financial position, afford to pay even very small salaries.

As the MOH well knows, the issue of salaries is especially lively in Puno, where health promoters working under Catholic Church

auspices in Juli receive a small monthly salary of a little under 10,000 soles per month and where promoters working for the Ministry of Education* receive 20,000 soles per month. The effect of this has been to motivate non-paid promoters to work with programs which offer some salary and/or to press the Ministry of Health for salaries. In 1983 the incumbent Minister visited Puno and is reported to have promised that the MOH would pay promoters salaries; this has not occurred but the memory of the promise is still vivid and continues to provoke tension.

However, the issue is not limited to Puno. There is a clear and apparently growing sentiment that the payment of some small, regular amount to health promoters is appropriate, even where there are concerns that this could generate subsequent, larger demands. The belief underlying this sentiment is that promoters have personal economic needs that merit response, that they should not find themselves out of pocket as a result of their promoter activities, and that a salary payment would not only make the promoter feel him- or herself part of the public health delivery system but induce that feeling in the community as well. The effect would be to upgrade the promoter role and add to his or her value in the eyes of deliverers and clients as well. A crucial dimension of this set of perspectives is the implication, not altogether consistent with the perspectives discussed above on training and supervision, that one of the major reasons promoters do not perform well is because they are working for nothing. Thus some kind of regular monetary recognition would, by definition, improve promoter performance. No one in this group of respondents seemed to see the sequence in reverse, that is, upgrading performance capability and rewarding it. This distinction is not trivial.

Relations with the Public Health System

The general perception among this group of respondents was that the promoter is the intermediary between the system and the community. He or she is the major link, primarily through referrals, to the Health Post, the Health Center, and hospitals.

As for the quality of the relationships produced by this structure, positive and negative opinions were fairly evenly balanced. One nurse from Huanuco, for example, thought that most personnel in the system -- sanitarios, other auxiliary personnel, and nurses -- gave as much support as they possibly could to promoters, understood their problems, and perceived the need for their role; the exception is the physician, whose interest in the promoter role and promoter needs and problems is said to range from minimal to non-existent. There was some feeling among the nurses in Pucallpa,

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* The percentage of the current expenditures component of the 1984 budget allocated to the Ministry of Education is 24%, compared to 8.4% for the Ministry of Health. (See Chapter VI for further analysis of the financial aspects of the promoter program and the realities of the size of the health budget.)

Puno, Arequipa, and Piura that there were problems of jealousy and competition between the sanitario and the promoter which, in some cases, induced promoters to by-pass the Health Posts in referrals and problem-solving. Further exploration in Pucallpa suggested that, while there were some individual personality problems between sanitario and promoter, at least some of the by-passing occurred for geographical reasons -- access to the hospital was, for some promoter sites, simply easier than it was to the Health Post, which could mean a wasted trip if a higher level of care were needed -- and because patients anticipated that the Health Post could not respond, either with medicine or skills, to the medical problem at hand.

At the same time, in at least two sites, nursing personnel commented that they were seeing a gradual deterioration in the quality of relationships between the MOH and promoters overall. A large number of promoters in Puno and Tingo María, perhaps not coincidentally sites of different types of volatility, were said to have "lost faith"; some have continued to work as health promoters but independent of any institutional relations and have become, in effect, independent practitioners. It is the view in some quarters of the Ministry of Health that such dropouts are largely driven by economics ("el deseo de lucro"), rather than by loss of faith in the public health system; in areas of such acute economic need, it is not clear that the two need to be mutually exclusive.

Relations with the Community

Community support is viewed by all respondents as a basic requirement for any kind of promoter activity and a sine qua non for its effectiveness. The potential and appropriate manifestations of such support tend to be seen in rather practical, concrete terms, rather than in terms of the general philosophical "goodness" of community support per se.

Among the ideas respondents offered were:

- Community pharmacies. The community and its participation are seen to be the axis of this activity. Communities which chose to support promoter initiatives in this area or to initiate such activity themselves would have access to reasonably priced medicines; promoters who worked in communities where such support was forthcoming could more adequately respond to community expectations for curative care, which would then enhance their chances of eliciting community interest in preventive interventions. It was not expected that communities would see prevention a priori as a way of avoiding the need for curative care; rather that the ability to respond to curative demands would constitute an entering wedge into an area where there is little perceived interest or ability to respond.

- Health Post construction. The nurses felt that communities might well respond with the construction of a service locale for the promoter. This has occurred in some communities and is said to give the promoter a sense of prestige and value in his or her role; it is also possible that it could promote the rivalry that some nurses already

see between the promoter and the sanitario. Nevertheless, in most areas, promoters tend to work out of their own homes and community participation in facility construction remains at the level of promises.

In fact, over half of the nurse respondents felt that the more common condition was a lack of community support and that, in turn, this constituted a major reason for promoter abandonment. Exceptions (e.g., Tarapoto) are likely to be found in situations where promoters are themselves community leaders with some leverage of their own or where they are closely allied with the local power structure by ties of kinship.

d. Promoter Impact and Contributions to Health Care

In the light of the preceding discussion and the variability of opinion it reflects, it is not surprising that nurses' perceptions of the overall value and effectiveness of promoter activities are correspondingly diverse.

About one-fourth of this group said that they knew promoters who were extremely competent, who were well supported by their communities, and who had effectively replaced or assumed the sanitario role. They agreed that communities which have such a competent and reliable promoter, particularly communities that are prohibitively distant from modern health care, feel themselves protected and secure.

At a somewhat lower level of enthusiasm but still generally positive were those who saw promoter impact only in terms of enhancing community participation in and compliance with vaccination campaigns.

In contrast, approximately another fourth of the nurses were of the opinion that the promoters they knew were having no real impact, were trying to practice too much curative medicine for which they were ill prepared, and were providing no effective preventive care or health education.

The rest of the nurses, about half, gave mixed responses. One nurse from Puno quite accurately observed that it was difficult to evaluate promoter effectiveness and almost impossible to assess promoter impact; the reason was the lack of adequate baseline data on the indicators customarily used for such evaluation (e.g., mortality, morbidity, and service statistics). Furthermore, performance indicators which might provide some proxy evidence of promoter activity, e.g., number of health talks delivered, are imperfect indicators at best and almost completely unreflective of quality of service. This respondent was cynical about the quality of available baseline data. Her case in point was the promoter who reported a community population of 11,000 in an area counted by the latest census estimates at about 2,000; the promoter had, in fact, redone the census, showing the inaccuracy of official statistics.

In general, the nurses felt that, although communities continue to request promoters and there seems to have been some increase in coverage, the real impact or effectiveness of promoter work and, by extension, the quality of that extension of coverage, are extraordinarily difficult to determine.

e. Problems

All the respondents in this group reported chronic problems with promoter desertion. The phenomenon was attributed to a variety of causes but the theory most frequently advanced was lack of any kind of regular remuneration. Other reasons included migration, lack of community and/or MOH support, and excessive demands by the community on the promoter's time. Migration is said to be especially a problem in the areas of Puno and Piura where natural disasters have forced agriculturalists, wiped out by floods or drought or both, to emigrate, at rates above already high levels.

In two areas, efforts have been made to reduce attrition rates. In Tarapoto, promoters sign contracts with the Ministry of Health regional office; if they discontinue service, they are expected to reimburse the MOH for their training costs. While this measure is reported to be effective in reducing attrition, it is also reported to be of dubious legality. In Pucallpa, the Danish program is using vigorous personal persuasion to impede a mass exit of their promoters, discouraged both by lack of community support and by MOH takeover of their program.

Another possible solution to promoter desertion is the incentive of upward mobility in the public health system. There was, however, no consistent perception among nurses about the overall level of competence and corresponding potential for upgrading of promoters. The only consensus was that promoter skill and performance depended largely on individual intelligence and ability. While many promoters are seen as bright and able, and even more are seen as motivated and willing to learn, the quality of training (and many of the nurse respondents themselves have training responsibilities) was so uneven, teachers so inexperienced or untrained as trainers, and content so erratic, that it was almost impossible for them to come to categorical conclusions about the potential of health promoters as a health delivery stratum.

According to the nurses, most of the promoters with whom they have had contact have expressed a desire for further training, primarily for the purpose of qualifying for permanent employment as sanitarios or auxiliares de enfermeria. In contrast with physicians, most of the nurses think that competent and qualified promoters should be given this opportunity. The only account of this sort of mobility being expressly used as an incentive for promoters was the case of the Hospital Amazónico, recently incorporated on a semi-autonomous basis into the MOH system; the Amazónico includes, as an element in its program policy, access to upgrading of promoters to sanitario level through special training opportunities. The policy is said to have been successful as a promoter incentive. On the whole, however, few of the nurses interviewed saw much real possibility for promoter advancement, partly because relatively few are believed to fulfill the most

basic requirement for sanitario-level entry -- completed secondary education -- and partly because there are presently very few available new openings at that level.

3. Sanitarios (N=50)

In varying degrees, técnicos sanitarios/auxiliares sanitarios and auxiliares de enfermería (auxiliary nurses) work with promoters as supervisors, co-workers in vaccination campaigns, and suppliers of medicines. Because of these interrelationships and because the sanitarios are typically the closest immediate supervisors of promoters, we included as part of the total universe of Ministry of Health interviews, interviews with the 50 sanitarios selected at random to do the community and promoter interviews.* These interviews were conducted as a standard component of the training sessions carried out prior to the promoter and community survey activities. For the most part, the sanitarios were responsive and candid in giving their views on promoters and the promoter role, views that are particularly valuable given the years of experience many sanitarios have had working with promoters. A summary of the findings from these interviews follows; a copy of the interview schedule is included as Appendix F.

a. Promoter Role Focus and Content

With regard to the question of whether the greater emphasis in the promoter role should lie with preventive or curative care, 44 (88%)** sanitarios responded that prevention and education were the most important dimensions of the promoter role; two sanitarios rated both dimensions as being of equal importance; and four responded that the emphasis in the promoter role should be on curative care. There was no significant variation in this position across the total sample of 50 sanitarios from all eight Health Regions.

b. Selection Process and Criteria

Thirty-three sanitarios felt that males made better promoters because they were able to make house calls at any hour, travel farther faster, and because they were generally more efficient. Four responded that either sex was suitable, while 13 preferred female promoters. Over half of those preferring females were female sanitarios from San Martín and Ica. Their main reason was that patients tend to have more confidence and trust in female health personnel in general.

There was virtually unanimous agreement that practitioners of traditional medicine should be trained as health promoters; in fact, 22 of the sanitarios reported knowing of such cases. The reasons given

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* As indicated in Chapter II, for interview purposes, sanitarios were explicitly assigned outside their customary zones of functioning to forestall possible bias.

** There were 50 sanitario interviews. For economy's sake, in this section we will not carry percentages along with the numbers. The reader interested in percentages simply has to double the absolute number.

for what was, in effect, a recommendation were: the extensive experience of the THPs with solving health problems, the rather ample scientific basis and therapeutic efficacy of traditional medicine in general and the traditional pharmacopeia in particular, and the high degree of confidence and esteem that THPs enjoy in Peruvian rural and peri-urban communities. The primary obstacle to the training of traditional practitioners, perceived by three of the sanitarios, was their typical lack of formal education and their lack of any apparently urgent desire for training as health promoters. At the same time, sanitarios did not see previous experience as a THP as a necessary selection criterion.

When asked what specific criteria should be used to select candidates for promoter training, the sanitarios as a group prescribed the following, presented in order of magnitude (frequencies are given in parentheses):

1) Community confidence (22)
2) Native of community (18)
3) Meet educational requirements (18)
4) Responsible individual (12)
5) Community leader (11)
6) Have an interest in the vocation for medical work (11)
7) Be married, with children (8)
8) Willing to work (7)
9) Older individual (5)
10) Younger individual (4)
11) Steady income (3)
12) Practitioner of traditional medicine (1).

As for their experience with the actual selection process, 37 sanitarios said that the promoters they knew had been selected by a vote in a Community Assembly, after having been subjected to a screening and selection process by community leaders.

Fifteen said that, according to their own experience and knowledge of what actually happens, promoters are first selected by community leaders and then ratified by Community Assembly vote. Twelve said that the candidates are picked by MOH personnel and then ratified by commmunity vote, two knew of cases where the promoter had been picked by community leaders with no subsequent voting process, and three said that promoters were generally picked with no community participation.

c. Systems Support

Training and Re-Training

Forty-one sanitarios said that, through their own experience and observation, they had become familiar with the curriculum content and teaching methods used in promoter training, as well as with the typical duration of promoter training courses. When asked if they had ever actually participated in promoter training in any role, only nine responded affirmatively; four of these were from Ica, which should probably be viewed as atypical because of its "model program" status.

For those who participated, such participation commonly took the form of giving talks about community health problems and/or vaccination campaigns.

Sanitario perspectives on the appropriate content of promoter training presented an interesting contradiction: despite the avowed preference for a preventive emphasis in the promoter role -- and, indeed, "preventive activities" ranked high in the recommended content list -- the most highly ranked content recommendation was "first-aid procedures." This ranking was elicited by asking what should be taught to promoters in training courses, as opposed to what was the appropriate content of promoter role (see above).

Recommended curriculum content was:

1) First-aid procedures (29)
2) Preventive activities (20)
3) Environmental sanitation (14)
4) Maternal/child health (9)
5) Family planning (8)
6) Diagnostic and curative activities (8)
7) Participation in vaccination campaigns (7)
8) How to give good injections (7)
9) Use of medicines (5)
10) Criteria for patient referral (3)
11) Practice sessions for medical procedures (3).

There was no important variation among regions in the quality or quantity of response on this issue.

When asked for an opinion on the quality of the promoter training programs with which they were familiar, 27 sanitarios responded that they thought the courses were "good," 12 responded that they were "adequate," and 11 said that they were "poor." In other words, close to half of this group of respondents displayed limited enthusiasm for the quality of the promoter training they had had exposure to. The two most common criticisms were: students were given too little practical experience in both field and classroom, and there was a lack of didactic materials.

When asked a general question about how to improve training the sanitarios were quite clear about what they thought might be done. In order of frequency of mention, they suggested:

1) More practical experience (primarily first aid,
2) infections, and wound dressing) (13)
3) More didactic materials (e.g., audio-visuals,
4) charts, practice equipment, etc.) (12)
5) More detailed course content (10)
6) More medical/curative content (8)
7) Longer courses (8)
8) More about prevention (6).

On the embattled issue of whether or not promoters should be allowed and taught how to use and give medicines, the overwhelming majority (47) of the sanitarios interviewed responded that

promoters should most definitely be both allowed and taught to use medicines. However, 29 added that the permitted pharmacopeia should be limited to basic items and that more sophisticated and "dangerous" drugs should be prescribed only by a doctor and distributed or administered under the supervision of health personnel with training beyond the typical promoter level.

The use of injectables occasioned a similar sort of response, with similar distributions. Only a small minority of the sanitarios said that promoters should not be allowed to perform any injections whatsoever. As a matter of fact, the sanitarios, almost en masse, felt that it was indispensable to give promoters training in the correct administration of injectables, equipment maintenance, proper use, hygiene, and so forth, since they were the only resource available in isolated rural areas. This skill was considered particularly important in areas where tuberculosis was endemic and where access to medical care was constrained; it was also considered an appropriate emergency skill. The caveat placed on promoter use of injectables was similar to that placed on pharmaceutical use in general, that is, that promoter use of injectables be limited to a basic and well-defined kit, that the more sophisticated and riskier medications be restricted to higher care levels, and that any injections permitted be subcutaneous or intramuscular only; the administration of intravenous injections by promoters was to be explicitly and emphatically proscribed.

On the question of promoter preparedness and knowledge levels immediately after training, almost half the sanitarios felt that promoters were adequately prepared to do first aid and diagnose diarrheas, malarias, and respiratory infections; the others did not agree. The most positive responses came from Ancash, Arequipa, and Ica; the negatives were clustered in Callao, Huánuco, and San Martín; in Piura and Puno, responses were evenly divided.

Supervision

The sanitario is, by virtue of institutional structure and, usually, geography, the most immediate supervisor of the promoter. As such, the sanitario assumes supervision to be a natural and important part of his or her role, as does the promoter. Despite some reports of personality clashes, competition, political problems, and/or spatial duplication of effort, in general both members of this dyad (binomio) participate in it constructively. Sanitarios, although effectively untrained in supervision, have a rather broad view of supervision and are likely to see it as a supportive and problem-solving role. Competition is more often generated between the sanitario and the auxiliar de enfermeria, largely because of blurred role definition; when it arises as an element in the sanitario-promoter relationship, it is characteristically tied to concerns about promoters becoming full-time salaried MOH employees who would clearly have role parameters and jurisdictions which would overlap uncomfortably with those of sanitarios.

An important dimension of sanitario supervision of promoters is record-keeping. The whole issue of record-keeping revealed some interesting variability in terms of the recent history of this activity,

compliance with norms, and of the structure of the information system itself. Eleven sanitarios from Arequipa and Puno observed that, while many promoters had in previous years been quite conscientious about record-keeping, there had been a sharp decline in their punctiliousness over the past year or two; they noted that promoters tended not only not to turn in records of their activities but not to keep such records at all. However, over half of the sanitarios (30) were satisfied with promoter record-keeping in general; although some complained that the related forms were being turned in to the local hospital rather than to them, this was a function of regional variation and information flow rather than an expression of animosity between sanitario and promoter. The dual supervisory system in Tarapoto, described above, attempted to set up an information system predicated on the sanitario-promoter dyad, with compliance enforced through salary payment incentive. A promising approach, it was vitiated due to curtailed funds for per diems.

Compensation

When asked if promoters are typically charging for medicines and/or services, a very large majority (39) of the sanitarios said that all the promoters they know do impose or collect such charges; several of the sanitarios from Arequipa added that some of the promoter charges were, in fact, excessive. Nevertheless, almost all the sanitarios (48) felt that the concept of fee-for-services was well justified. Their primary reasons were: the need of most promoters for income (18); the need to establish or maintain a stock of medicines, supplies, and equipment; and the appropriateness of compensating promoters for time sacrificed and, possibly, foregone income while they carried out their promoter duties.

On the sensitive matter of whether promoters should receive some sort of regular salary from the Ministry of Health, the fifty sanitarios were evenly split along affirmative and negative lines. Among the former, 13 felt that the compensation should be a minimal amount ranging from 15,000 to 50,000 soles per month. This group rather regularly and variously characterized such compensation using terms that verged on the euphemistic -- estipendio (stipend), propina (tip), incentivo (incentive), estímulo (stimulus), or gratificación (gratuity/fee/allowance). A very small minority, two sanitarios from Puno, felt that the promoters should get a regular salary from the Ministry of Health which would amount to something a little less than what was paid to sanitarios. They noted that when the incumbent Minister of Health had visited Puno in 1983 and talked to representatives of the Promoter Association (Asociación de Promotores de Salud Manuel Núñez Butrón), it had been their impression that he had effectively promised that salaries would be paid to promoters.

Of the 25 negative responses, 11 went on to suggest that remuneration should be paid to promoters but the source of such remuneration should be the communities where the promoters worked. This viewpoint tended toward virtual unanimity in Ancash and Ica.

Relations with the Public Health System

Thirty-eight sanitarios said that, in general, their relationships with the promoters in their areas of responsibility were good. However, when probed about changes over time, they observed that promoter-sanitario relations had been better "before," meaning about a year ago. One respondent felt that competition between promoters and sanitarios was the main reason. Seven said that their relations were "correct," which in Spanish has decided overtones of tepid enthusiasm; only one admitted to generally bad relations; and four sanitarios had had no experience in working with promoters.

The experience of sanitarios with the involvement of promoters in vaccination campaigns is of particular interest, since there is some feeling in the international health community that one of the most appropriate and useful components of the role of either paid or unpaid promoters is the support they can provide for various sorts of health campaigns; these include not only vaccinations but distribution of antiparasiticals, oral rehydration salts, and other curative or preventive health interventions that can be handled effectively on a campaign basis. About two-thirds (33) of the sanitarios said that promoters had helped them out during vaccination and other preventive campaigns, principally by informing households in their area of responsibilty about the times and places of innoculations and preventive health talks. Five of the sanitarios said that only some of the promoters in their areas had been disposed to cooperate, and three claimed to have received no help at all from the corresponding promoters. When asked about how well promoters understood the instructions the sanitarios gave them, 39 answered that comprehension was good; only one sanitario gave a negative response.

Three-quarters (39) of the sanitarios found the promoter's role in the referral process to be adequate. The bulk of such referrals were for illnesses correctly diagnosed as serious, tuberculosis, snakebites, anemia, dehydration, childbirth, accidents, lacerations requiring sutures, birth control information and supplies, diarrheas, and lack of medicines. Four sanitarios had found that very few patients were referred to them; four had not worked with promoters.

d. Promoter Impact and Contributions to Health Care

Many (33) of the sanitarios felt that promoters do have a positive impact on community health, 10 felt that their impact was limited, and three felt that promoter impact was nil. When asked for specific areas of positive impact, sanitarios anwered with quite a wide range which was primarily hypothetical, since they had no data to substantiate their responses. Sanitarios referred to lower infant mortality rates, less diarrhea, better coverage of vaccine-preventable diseases, improved hygiene, lower birth rates, improved nutrition, better-quality drinking water, and improved environmental sanitation. In the absence of supportive data, it seems correct to view these

responses as falling in the category of what impact promoters could have, in the sanitarios' view, rather than as a meaningful reflection of any real impact.

Sanitarios were asked to rank the problems they saw in communities in their areas on which promoter activity could have some conceivable impact. They did so as follows:

1) Environmental sanitation (19)
2) Diarrheal diseases (11)
3) Potable water (10)
4) Infectious diseases (9)
5) First aid (8)
6) Vaccination campaigns (7)
7) Family planning (4)
8) Diagnosis of tuberculosis (4)
9) Prevention (3)
10) Hygiene (3)
11) Latrines (3)
12) Maternal/child health (3)
13) Educational talks (2)
14) Patient referral (1).

Obviously some of these problems and need areas overlap and some are less problem areas than they are areas of potential activity; however, these responses were elicited in open-ended fashion and are presented as such.

e. Problems

Aside from health problems, sanitarios were asked about their perspectives on the major problems in the communities they and their associated promoters were responsible for. The most frequent answers were primarily economic -- lack of jobs, low incomes, and low farm prices led the list with a total of 41 responses -- and others included:

1) Lack of potable water and sewers (14)
2) Lack of transportation and good roads (12)
3) Lack of schools and teachers (10)
4) Malnutrition (8)
5) Bad weather (5)
6) Lack of electricity (4)
7) Abuse by authorities (police, politicians, military) (3)
8) Inadequate housing (2)
9) Poor environmental sanitation in general (2).

Most of the respondents thought that most of these problems, in their turn, derived from generally poor economic conditions, unemployment and, in the case of Puno, from the drought followed by flood. Overall, the basis for almost all their problems was seen as essentially economic.

Finally, there was a genuine concern expressed by sanitarios over what they saw as the plight of the promoter, who customarily has inadequate training and few supplies and medicines, yet who provides the only modern health service available to a large portion of the Peruvian population. Beyond this broader concern, sanitarios agreed that a well-trained and capable promoter was vital to the effective performance and ultimate impact of their own activities.

As for the problem of desertion, essentially a system problem, sanitarios felt that the most common reason why promoters stop working or work in erratic or intermittent fashion is lack of remuneration. In order of importance based on frequency of mention, these were the factors sanitarios felt were the most weighty contributors to promoter desertion, feelings based primarily on their own experience rather than on personal theories:

1) Lack of remuneration (40)
2) Lack of materials, equipment, and medicines; lack
3) of MOH support (10)
4) Lack of community support (8)
5) Emigration (8)
6) Lack of time to work as a promoter (7).

It is interesting that some of the explanations which are not explicitly tied to remuneration have, nevertheless, some economic implications or undertones. Thirty-three of the sanitarios went on to theorize that some form of remuneration, either from the Ministry of Health or from communities, could contribute importantly to decreasing promoter attrition rates, although none seemed to consider the possibility of some contribution from both sides. Thirteen sanitarios also perceived a need for more community support of promoter activity, eleven said more stringent supervision was the answer, and eight recommended improved supplies of materials, equipment, and medicines.

Many, if not most, promoters indicated in the promoter survey (discussed in Chapter IV) that they considered the opportunity for upward mobility in the public health service desirable and appropriate; in general, they tended to see this as occurring through access to continuing education, to be provided by the MOH, which would permit them to become sanitarios or auxiliares de enfermeria. Our various survey and interview efforts indicate that the number of promoters to have been offered such training opportunities is minuscule. Almost half (21) of the sanitarios indicated that the promoters under their aegis do want additional training to become sanitarios; 16 said that only some of their promoters had displayed such interest; and 11 knew of none. Only five sanitarios knew of cases where this had actually happened and these only in unusual circumstances, e.g., a promoter with completed secondary education.

4. Summary and Analysis

a. Role Focus and Content

The major area of consensus among the three levels of the MOH at which interviews were made was that the promoter's role should be primarily preventive, with only a marginal curative dimension. Doctors were the most conservative about the size of this curative margin and, overwhelmingly, tended to want to limit the promoter's activity to health-related community development promotion (e.g., gardens, environmental sanitation), support of feeding and vaccination programs, infectious disease monitoring, and malaria and tuberculosis diagnosis. They virtually excluded maternal/child health responsibilities, in the belief that those were properly the province of the TBA, and would restrict management of child diarrheas to early use of ORS/sueros caseros/herbal antidiarrhetics, and to referral to higher care levels, without any ancillary dietary advisories to mothers. First aid interventions would be confined to topical emergency care (e.g., pressure bandaging, temporary splinting, snakebite management) and referrals for all but the simplest problems to Health Post or Center.

This perspective was shared quite generally by the sanitarios, most plausibly because they are most likely -- and most naturally -- inclined toward apprehension about competition or at least role duplication from the promoter. Nurses were considerably more inclined to expand the promoter role to include MCH activities (especially related to identification of high-risk cases) and family planning. All groups agreed that the pharmacopeia permitted and supplied to the promoters should be limited to a minimal set of analgesics; antipyrrhetics; topical, optic, and oral antibiotics; and basic first-aid materials. Nurses were disposed to add anti-diarrhetics. All groups were ambivalent about the use of injectables, doctors most intensely and sanitarios least; doctors grudgingly recognized that promoter injection activity was already rampant, but only nurses and sanitarios thought this should be frankly accepted and that promoters should be educated about proper antisepsis for subcutaneous and intramuscular injections and about the drugs they should appropriately use (e.g., TBC therapy and medically prescribed materials).

In general, system perceptions of suitable promoter role content does not follow predictable directions as one moves down the delivery pyramid. Doctors are by far the most likely to want to limit that role to prevention, followed by sanitarios; only one doctor presented a vision of the curative promoter. At the same time, sanitarios are not consistent: when asked what sort of training was most important

for promoters, they responded "first aid." Their definition of "first aid" is more ample than that of doctors, in consequence of their proximity to rural realities. Nurses, on the other hand, largely prefer a more ample promoter portfolio. It was from this group that the suggestion emerged to train two promoter types discriminated by the single factor of distance: one for remote areas with more training in curative medicine and a bigger kit, and one for more accessible areas, with a largely preventive mandate.

b. Selection Process and Criteria

There were few differences among doctors, nurses, and sanitarios in this area. All felt that promoters should be natives of their communities, be able to read and write or meet whatever educational requirements were stipulated,* be responsible and willing to work hard, be married with family, and have a regular income. There was some dissensus on the subject of sex: Sanitarios and doctors of either sex generally preferred males; nurses were evenly split; some suggested training of couples as the optimal solution.

All agreed that the selection process should be predicated on community consensus, which involved selection of suitable candidates by community leaders and subsequent vote in Community Assembly. Nurses and sanitarios, perhaps because they know more about rural power structures, were more apt to feel that promoters should be community leaders or related to those by some kind of kinship ties, which would afford them more leverage in pursuit of preventive health goals.

Finally, doctors, nurses, and sanitarios agreed on the merits of training traditional practitioners as promoters, as indeed they agreed on the merits of utilizing traditional medicines. However, they were similarly pessimistic about the potential of doing so, because they perceive such practitioners (perhaps erroneously) as usually illiterate and because they doubt (probably correctly) that most traditional practitioners are interested in becoming health promoters.

c. Systems Support

Training and Re-Training

There were important differences in philosophy about promoter training among the several MOH service levels. These have major implications for the promoter program as a whole. Nurses were concerned about the quality of training and the effects of budget and logistical problems on that quality, and on the system's capability to provide re-training with adequate frequency. Doctors tended to share the concept of the "disposable promoter." Because of perceived high desertion

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* These seem to vary regionally, from required functional literacy to completed primary school.

rates, MOH physicians thought that initial promoter training investments should be kept low and they displayed little interest in the details of that training. At the same time (and somewhat contradictorily), they felt that promoters need frequent re-training; again, they saw this in minimalist terms.

It is far from clear that the "disposable promoter" is really economical. Calculations based on recent data from the Piura-Tumbes Regional Office indicates that the development of a promoter (including recruitment, training, equipment, and furniture) costs approximately US$632; this does not include such startup support costs as those for supplies (medicines and medical supplies) which are theoretically recoverable from fees for services. Refresher training costs $50. Even assuming that startup equipment and furniture can be recovered from deserters, recruitment (US$72) and initial training costs (US$160)* add up to US$232 per new promoter -- not a trivial amount. Decisions about length of training might be better made on the grounds of role content and promoter capacity to respond to community needs than on the grounds of savings which may be, in the longer term, negligible or non-existent.

Supervision

There was a clear schism between doctors and nurses on the subject of supervision. While both groups concurred that promoters need frequent or constant supervision, doctors in administrative positions did not assign it high priority and were, in the main, unwilling to sacrifice other expenditures (e.g., hospital support needs) to see that supervision of outreach workers got done. Nurses felt that supervision is central to promoter success and should assume priority. Doctors viewed supervision as essentially a charla count. Nurses evidenced a broader view of supervision, which includes checks on performance and identification of continuing education needs. Unfortunately, for primary health care concerns, nurses do not control the purse strings.

Logistics and Supply

Physicians were, not surprisingly, concerned about the lack of functioning vehicles and fuel for day-to-day operations, a concern which takes priority over supervision and supply of outreach workers. Their assumption was that adequate medicines are somehow available, if only through local pharmacies. Nurses and sanitarios were aware that, where they had ever existed, the startup pharmaceuticals intended for replacement on a revolving basis through MOH facilities have been largely decimated. Thus, promoters must generally re-stock

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* The data from different regions on the costs of training were incomplete at the time of this writing. What was received showed wide variation and inconsistency in reporting and accounting which made serious comparisons at the present time almost impossible. The proposed systematization of accounting and training in accounting being explored by the MOH and AID should help in this area. However, until systematization occurs, these figures should be considered only as illustrative presentations meant to provoke further thought.

through local pharmacies in the absence of MOH capability to keep them supplied. Nurses noted the effect of this situation on prices, which vary wildly, and on the possibilities of controlling the medications promoters use and the way they use them.

Compensation

All groups agreed that promoters should be able to charge a modest markup on basic medicines to permit re-stocking. And all groups agreed that promoters should receive some sort of compensation, although doctors were most reluctant about this being monetary. The terms characteristically used were: "stipend," "incentive," "tip," "stimulus," or "gratuity." Suggested amounts ranged from 15,000 to 50,000 soles per month. Opinion varied on the proper source of this reimbursement, with a substantial minority committed to the view that at least some of it should come from the community as well as from the MOH. Nurses and sanitarios saw the promoter's economic necessity and the importance of reimbursement in upgrading promoter self-image and community prestige; their assumption was that one of the major reasons promoters do not perform well is because they are working for nothing, so that regular monetary recognition would, by definition, improve promoter performance. No one in this group ofrespondents seemed to see the sequence in reverse, that is, upgrading performance capability and then rewarding it.

Relations with the Public Health System and the Community

The members of the formal health system connected with some fixed facility perceived the promoter as an intermediary between that facility and the community. Doctors tended to see the promoter as external to the public health system and essentially tied to the community. Corollarily, promoter failure or dropout was viewed by doctors as primarily a function of lack of community support, not lack of system support. This is both cause and effect of the definition of the promoter as a temporary, disposable, basically volunteer, human resource. Nurses see the promoter as playing a key role in PHC delivery, so that lack of either or both kinds of support produces failure and/or desertion. Sanitarios, when they do not view promoters as competition, see them as an outreach resource for themselves and are less apt to think in terms of support or lack of support from either system, for reasons that are not clear.

5. Promoter Impact and Contributions to Health Care

All respondents were constrained by the lack of evaluative data, so that their comments in this area were hypothetical. They thought that promoters must be having some impact because nothing else was "there", and they couched their answers in terms of what promoters could do, rather than in terms of what they actually did. No one ventured the opinion that something was not necessarily better than nothing.

6. Problems

A major problem in the promoter program was seen to be desertion. Nurses and sanitarios thought the primary contributor was lack of regular remuneration, followed by lack of community and/or MOH support. Other than some compensation and improved support, nurses and sanitarios believed that the potential for upward mobility in the system could be a crucial incentive. Nonetheless, they saw few promoters as fulfilling the necessary educational requirements, although their interest was identified as high. Doctors, consistent with their overall perception of promoters, did not conceive of the promoter role as a career stepping-stone.

In conclusion, the MOH nurses who function in supervisor and trainer roles have, as a group, a much wider and more flexible range of opinions about promoters than do most MOH physicians outside central Ministry headquarters, and are more inclined to think innovatively about possible solutions. Sanitarios occupy a generally middle position between nurses and doctors, contrary to what the health pyramid structure might predict. The sensitivity of nurses and sanitarios to promoter needs, desires, and problems is indisputably greater, as is their conviction that, given adequate support, training, supervision, and incentives, promoters can provide valuable service.

B. Training Evaluation

1. Basis of Evaluation

As part of the overall evaluation of the health promoter programs in Peru, promoter training courses were evaluated in February and March of 1984 (see Table III-1). Three approaches were used to assess the adequacy of training programs:

a. Several curricula were reviewed, including the Ministry of Health's national models of 1979 and 1983, and others from six different health regions. The curricula from the four regions in which health promoter case studies were done were examined in more detail.

b. Three training courses for promoters were actually observed: two basic 30-day courses in Acora and Ayaviri in the Puno region, and a promoter 7-day refresher course in Anta in the Cuzco region. Observation of another course was also programmed for Pucallpa; however, severe weather conditions forced cancellation of the course.

c. As part of each regional case study of promoters (see Chapter IV), their training experience was explored. The people in charge of promoter training and supervision at the regional, area, and district levels were interviewed in the four regions studied. For each region, information on past and present promoter training programs is summarized in the individual case studies. The adequacy of the training programs was analyzed from the perspective of the promoter's actual functions and needs.

TABLE III-1

PROMOTER TRAINING IN FOUR REGIONS OF PERU: A COMPARISON

	Year Modern Promoter Training Began	Number of Promoters Trained up to 3/84	Length of Course 1983-84
I. Ica	1979	833	14 days
II Piura	1980	160	30 days
III. Cuzco	1980?	300?	7-30 days
IV. Puno	1974	711	30 days

2. Curricula Reviewed

The curricula reviewed were: a) the Ministry of Health's national norms for promoter training courses in 1979 (230 hours) and 1983 (144 hours); b) the curricula for promoter training courses in the four regions studied: Ica, La Unión (Piura), Anta (Cuzco), Ayaviri (Puno), and Acora (Puno); c) three curricula from 1982-83 for regions outside the case studies: Huarmey and Huari in Ancash, and Pucallpa in Huánuco.

a. Ministry of Health: Table III-2 presents Ministry of Health norms for promoter training courses in 1979 and 1983:

TABLE III-2

MINISTRY OF HEALTH MODELS FOR PROMOTER TRAINING CURRICULA: 1979 and 1983 COMPARED

1979

Unit I	Community Development	47 hours
Unit II	Basic Sanitation and Control of Infectious Diseases	72 hours
Unit III	Maternal and Child Health	56 hours
Unit IV	First Aid, Simple Curative Medicine	48 hours
	Orientation and Final Exam	7 hours
	Total	230 hours

1983

Unit I	Community Development	37 hours
Unit II	Basic Sanitation and Control of Infectious Diseases	26 hours
Unit III	Primary Care	74 hours
	Orientation and Final Exam	7 hours
	Total	144 hours

Between 1979 and 1983, the Ministry's official curriculum for the training of health promoters was shortened by 86 hours to make a 30-day basic promoter course more feasible. It can be seen that in this 5-year period Units III and IV of the 1979 model (maternal and child health, and first aid with simple curative medicine) were combined into one Unit III (primary care in general). Maternal/child health lost its separate identity, and some specific program teaching was markedly shortened, especially with regard to infectious diseases. The time spent on tuberculosis was reduced from 19 hours in 1979 to 5 hours

in 1983. For malaria, the teaching time decreased from 10 hours to 4 hours. About 10 hours less is programmed for nutrition in the 1983 curriculum, but most of this time came out of the community development section.

Although the 1983 model eliminated largely preventive topics, a lot of the material deleted was perhaps too specific for such a basic course. On the surface, the 1983 curriculum appears much more oriented toward curative medicine and less directed toward maternal and child health. Unfortunately, the promoters' utilization patterns also demonstrate the majority of their efforts to be in adult curative medicine. The 1983 model, which is seemingly predominantly designed for curative functions, is more consistent with the third and fourth stated objectives of the promoter role (first aid and simplified health care) than with the first and second objectives (promotion and prevention.

b. Ica: The promoter training course curriculum for Ica seems very well organized. It was developed in 1981, and has 120 hours of instruction followed by three weeks of supervised practice in the field. The curriculum is particularly strong in maternal and child health, including family planning, and this emphasis is reflected in the type of work done by the promoters. Of the four regions studied, Ica had its promoters most involved in family planning. The Ica curriculum is shown in Table III-3.

TABLE III-3

ICA: HEALTH PROMOTER TRAINING COURSE CURRICULUM (1981)

Education Units or Objectives	Number of Hours Theory	Practice	Total	%
Inauguration	3.3	1	4.3	3.6%
Knowledge of Community	2	5	7	5.8%
Maternal Care	9.3	15.3	25	20.8%
Child Care	7	15	22	18.4%
Family Planning	6	14	20	16.7%
Communications, Education	4	6	10	8.4%
Information Systems	1	7	8	6.7%
Supervision	1.4	2.3	4	3.4%
First Aid	7	9	16	13.4%
Closing	2.3	1	3.3	2.8%
Total	44	76	120	100.0%

On paper, the Ica curriculum devotes 55.9% of the course hours to maternal and child health and family planning. Examining the details of the curriculum, however, one discovers that only one half-hour of the discussion of prenatal care is devoted to normal pregnancy. Similarly, only one half-hour is spent on well-child care in the child-care section: the course emphasis is on the sick child. The lack of well-child care was noticed on the field visits to the promoters in Ica. Tuberculosis and basic sanitation are given a total of two hours each in the curriculum, versus eight hours programmed for oral rehydration.* The lack of emphasis on basic sanitation and tuberculosis reflects the curriculum's weakness in prevention overall, except for family planning.

The teaching methods advocated in the document seem mostly participatory, as they are in most of the curriculum documents from other regions. In practice, the teaching methods may be much more lecture-based, as they turn out to be in the other regions where courses were actually observed. Ica's 120-hour promoter curriculum is somewhat theoretical anyway, as it was never implemented as a 120-hour curriculum. The promoter courses were in fact limited to two weeks, or about 80 hours, and the curriculum was modified accordingly to fit the shorter time period for training.

c. Piura: The curriculum used at the most recent promoter training course held in September-October 1983 in La Union (Bajo Piura) is very similar to the 1983 national model. It was divided into three teaching units:

I. Promoter Participation in Promotion and Community Development: 37 hours
II. Basic Sanitation and Control of Infectious Diseases: 26 hours
III. Primary Care: 80 hours.

Designed as a 30-day curriculum, it included 10 hours for nutrition, 11 hours for environmental sanitation, 13 hours for maternal/child care and family planning, and 16 hours for first aid. The nurses in charge of giving the course at La Unión commented that they would have liked two weeks more for the course since the students' adaptation time was considerable. They felt that follow-up in the field should have been an integral part of the training course, but was impossible logistically.

d. Cuzco: The curriculum for the six-day refresher course for promoters at Anta (held February 1984) was designed locally. In fact, the regional director of training in Cuzco said that it was planned to have each area in the region develop its own curriculum (although this had not yet been done). Although the Anta course was supposed to be a refresher course, for almost half the promoters attending, it was their first course. The curriculum breakdown was

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* This is more a concern to get up to speed in this area of current worldwide attention, than it is a reflection of anti-preventive bias.

as follows:

I. Community Development and Administration: 6 hours
II. Environmental Sanitation and Infectious Diseases: 8 hours
III. Medical Attention or Primary Care: 26 hours.

The community development section included an hour on traditional medicine. The eight hours in the environmental sanitation time included one hour on immunizations and one hour on statistics. The primary care time included an hour each on tuberculosis, family planning, and alcoholism, as well as three hours on nutrition. Within the curriculum, approximately 50% of the time is devoted to "preventive" topics. In practice, the curriculum was not strictly adhered to; this is likely to be the case with all promoter curricula.

e. Puno: There is an elaborate promoter training curriculum, developed at the regional level in Puno, which has three units and is very similar to the national model in content and organization. However, from examination of the curricula actually used in the Ayaviri and Acora training courses observed in person, it is obvious that the elaborate and detailed regional model is used only as a framework. The actual course curricula are very much designed on the spot and modified on a day-to-day basis in accordance with logistical reality.

In Ayaviri, although the course had begun several days earlier, the curriculum was not yet completed. In fact, only the first 11 days of the curriculum had even been laid out. The nurse educator in charge of the course was obviously designing the curriculum on a day-to-day basis. The fluid design of the curriculum was influenced by perceived needs and available teaching resources; both of these changed on a daily basis. What had been planned as the curriculum so far reflected a heavy bias towards curative medicine, and more theory than practice.

The Acora promoter course curriculum had been designed in fair accordance with the regional design, using the three basic units (see the 1983 Ministry of Health model above). The third unit (primary care or atención a las personas) listed 67 hours of teaching time, divided as follows:

Food and Nutrition	8 hours
Vaccinations	14 hours
Prevention & Treatment of Most Common Childhood Illnesses	14 hours
Tuberculosis	4 hours
Pregnancy, Family Planning, & Newborn Care	6 hours
First Aid	13 hours
Legal Medicine & Civil Defense	8 hours.

Although it followed the general regional design, the course curriculum was finalized locally by the nurses in charge of giving the course and by the area training director. More importantly, the actual implementation of the curriculum was, of course, done locally.

And from observation, the actual course content varied considerably from the design on paper. Although each topic was divided into "theory" and "practice," it was observed that "practice" could be done with the aid of a blackboard alone. Since teaching materials were scarce, more didactic methods were used than the curriculum indicates. The juggling of teaching resources also led to major modifications in subject matter and in the projected times devoted to each subject. Other seemingly uncontrollable logistic factors forced yet more modification of the curriculum.

A projected curriculum for the 5-day promoter refresher course planned for the end of March 1984 in Acora was reviewed and appeared very adequate and primarily aimed at prevention. However, the nurse who was the course coordinator and who had designed the curriculum said that, in fact, they would analyze the needs of the promoters on the first day of the course and then modify the curriculum accordingly. It was easy to understand how there may be little resemblance between the written curriculum and the actual course, and that the availability of training materials and resources are deficient or haphazard largely because of the the inevitable last-minute or on-the-spot planning.

f. For comparison, three promoter training curricula for courses outside the four case-study regions were reviewed. These were from a 1983 course in Pucallpa (Huánuco), a 1982 course in Huari (Ancash), and a 1983 course in Huarmey (Ancash). The course summary for the Pucallpa course was very vague and gave no specific hours of instruction for each theme.

The Huari course, in which 18 promoters were trained in a 34-day course programmed for 238 hours, had a curriculum divided into 6 units. The curriculum was in fact similar to the national model, but included 32 hours for "intensive practice" or field work. Besides the 32 hours of field work, the teaching activities were made up of 103 hours of "theory" and 83 hours of "practice." Of course, since the course was not observed, it is impossible to say how close the actual course came to its curriculum, but the summary of the course included the comments that the methods used had been "mostly lecture," and there were not enough teaching materials.

From the summary of the September 1983 promoter course in Huarmey, it was observed that two nurse instructors gave 90% of the 30-day, 150-hour course. The curriculum was divided into three basic units: community development (30 hours), basic sanitation and infectious diseases (30 hours), and patient care (80 hours), plus 10 hours for orientation and evaluation. The material and human resources of the hospital in Huarmey were used for the course. The whole last week of the course (or at least the mornings) was devoted to practice in the hospital's outpatient department. Commentary on the course included the complaint that the funds for per diems and transportation were inadequate. It was also noted that there had been insufficient teaching and writing materials, and what materials there were had come late. The teaching methods were supposed to have encouraged the "active and critical participation" of the students, with considerable "group work."

3. Courses Observed

a. Promoter Refresher Course in Anta (Cuzco)*

I observed portions of a six-day promoter refresher course held in Anta (Cuzco), 13-18 February 1984. The course curriculum is reviewed above. The course was run entirely by the personnel of the Health Center at Izcuchaca in the district of Anta, about 30 km. from Cuzco. Participating in the course were 19 promoters and 9 trained birth attendants (TBAs); for about half of the participants, this was their first course of any kind. It was also obvious that the educational level of the participants was quite disparate; a few appeared not even to speak Spanish well. The promoter and TBA curricula varied some, but more than half of the course was held in a joint session with all 28 students present. The course was financially supported by the Instituto del Niño Andino, which paid for transportation and writing materials and gave a daily food stipend of 4,000 soles to each participant.

Despite their varied background, the students seemed interested and motivated; most took very meticulous notes. The students' most spirited questions were related to curative medicine, especially regarding specific medication dosages for various ailments. The teaching staff in general did try to stress the importance of prevention, but the students were more interested in the curative side. Although lectures were used, other teaching approaches also were observed: the students listened to a baby with a stethoscope, took the baby's temperature, and gave each other injections for practice. For the section on environmental sanitation, excellent quality videotapes produced in Puno were shown on a VCR on loan from the Ministry of Agriculture.

There was not much class participation during the film program; the instructors' questions mainly asked for repetitive feedback from the students rather than any active participation. There was really no discussion among the students themselves. The doctor's lecture on parasitology was too detailed and not at the level of the promoters or even practical, yet some students were mainly interested in fine details of treatment dosages. Since the Health Center at Anta had no laboratory means of diagnosing parasitic disease, learning specific doses of medications to treat undiagnosable diseases seems futile.

The promoters taking the course complained that they lacked medicines and medical materials. They complained of poor economic conditions and the lack of opportunities for education. They also complained that they had little community support, and asked that someone from the Health Center go out to the community to explain what the promoters were supposed to be doing. One of the instructors promised that the promoters would get supervision at their sites. However, with no budget for gasoline, the supervisory visits will probably remain theoretical.

It was observed that, although the curriculum is very neatly drawn out on a large flow sheet, many of the presentations were in fact shifted around, and hours were often shortened. The flow sheet

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* To date, the AID program has not been extended into Cuzco.

shows classes beginning at 8 a.m.; however, since the Health Center is locked up with a padlock until 8:30 a.m. each day (and the staff arrives some time after that), the classes did not commence until about 9 a.m.

In summary, specific observations on this course were:

- The classes were too large and student participation was thus minimized.
- Although some teaching materials were used, lectures were the primary teaching method.
- Good resources to aid in such courses do exist in other sectors and can be borrowed to improve the courses.
- Despite promises to the contrary, such backup resources for promoters as medicines, materials, and supervision are virtually non-existent once they return to their communities.
- The student group was extremely disparate.
- Nonetheless, there was much enthusiasm for learning.
- Moreover, the instructors seemed very well motivated and enthusiastic, despite their failure to incorporate participatory learning or competency-based methods into the teaching.

b. Basic Promoter Course in Ayaviri (Puno)

Because of time limitations, the limited availability of transportation, and a national work stoppage, only one day was spent observing the 30-day basic promoter training course which was taking place at the Ayaviri hospital in March and April 1984. The course curriculum is discussed above; it was yet incomplete. In fact, the existent curriculum only covered March 14 through 24, although the day I was there was March 21. The nurse in charge of the course (the area director of training) had only been in her new position for one month, and this was the first course she had directed.

The course itself had begun two days later than planned, due to lack of transportation in getting the students into Ayaviri. Although the students had been given notebooks, they had very few other materials until the regional training director came up from Puno with some training materials in the Ministry Land Rover that I was using. Since I paid the gasoline for the trip, the teaching materials might not have gotten to the Ayaviri course otherwise.

There were only 10 students in the course: nine men and one woman. They all appeared young, and I was told they all had had secondary education (at least through 8th grade). This smaller size group was much more manageable than the classes in the other two courses I observed and there was much more informal class participation.

All the teaching observed was lecture-type, and the curriculum indicated that the first week of the course had all been lecture as well. The nurse in charge of the course assured me that the students were getting theory first, and would then get practice, but that part

of the curriculum had not been designed yet. The one small blackboard available for the lecturer was difficult to read from. No audiovisual aids had yet been used, although these were promised. As there was no electricity, the lighting was poor.

A physician from the Ayaviri hospital gave a too-detailed talk on "surgery"; this included much more than these students would ever have to know about treating acute abdomens, instead of approaching the subject from the promoter's point of view. Promoters themselves commented that they had a hard time understanding clinical talks in general.

The talk observed on environmental sanitation also suffered from a lack of audiovisual aids and the use of complicated academic language. Class participation was largely only urged to parrot back facts. The environmentalist did put a little humor into his talk; generally the lectures to the promoters were devoid of humor. However, despite the dullness of some talks, the students always seemed to remain enthusiastic and interested, both in Ayaviri and the other courses observed.

Promoters also pointed out that their per diems were totally inadequate. They were getting 2,600 soles per day (AID-financed); their lodging cost them 2,500 soles a night, and lunch alone cost 1,500 soles. The AID figure of 2,600 soles a day had been established in February 1983, and had not been adjusted for the 125% annual inflation rate.

Some general observations on the Ayaviri course are:

- The curriculum was being designed in a very as hoc manner.
- The course was suffering from a lack of teaching aids.
- The course was very curative-oriented, and too lecture-based, heavy in unusable theoretical knowledge.
- The smaller group size seemed much more advantageous for participatory learning.
- The students seemed enthusiastic, and the instructors seemed interested.
- The per diems were totally inadequate.

c. Basic Promoter Course in Acora

I was able to attend the 30-day promoter training course at Acora on four different days. The course was scheduled to run from 3/5/84 through 4/4/84, but had been unexpectedly interrupted by four days of festivals in Acora (March 11-14) when the students returned home. There were 18 students, all men, and mostly in their late 20's or early 30's. Every man had a family and was so selected to increase his chance of staying with the job. In this area it was deemed inappropriate for women to be promoters, in contrast with Ica, where women were preferred over men in the selection process.

The course curriculum is reviewed above; as explained, the actual course varied greatly from the printed curriculum. Often scheduled lecturers failed to show up. Usually they were from Puno, and said they had no transportation to Acora or would not come because the Ministry would not provide transportation for them. Public transportation between Puno and Acora is frequent, takes less than an hour, and costs 1,500 soles or less. Sometimes, a topic would be cancelled or postponed to allow the promoters "time to wash their laundry," and the like. The civil defense program, scheduled for four hours, in fact took less than two. Lectures scheduled to begin at 1 p.m. really began at 2 p.m. Given gaps, postponements, and shortened times for topics, the number of actual course hours must be considerably less than the programmed number.

This type of "minor" logistical difficulty is the rule rather than the exception and frequently modifies the courses. The lack of a projector to show slides or movies is another example. Good projectors exist at both the regional and area levels, but without a single working bulb. A private projector is available, but there is no electricity in the school where the course was being held, and gasoline was not available to run a private generator that was offered for use. Two weeks after the beginning of the course, the students were finally provided with cardboard to do health education drawings, under circumstances similar to those in Ayaviri. Unfortunately, there was only black cardboard instead of white, meaning special chalk would have to be used to do the drawings; the regional director of training explained that no white cardboard was available in Puno.

The first class observed at Acora was to be a lecture on nutrition, but the scheduled speaker did not show up since he had not been provided transportation from Puno. The students instead were divided into groups, and, with some prompting from the nurses, practiced putting splints on each other. They used appropriate makeshift materials but complained that they did not have more formal splints and bandages to work with. After practicing splints, the promoter students took each other's temperatures. These were the only practical tasks I saw the students perform; the rest of the observed training was didactic Interestingly, the course coordinator assumed I would not be interested in watching the students put on splints.

There were a few charts and diagrams for teaching, but the blackboard was the most frequently-used teaching tool. The doctor at the Acora Health Center substituted for another scheduled speaker and gave a lecture on poisonings. For his talk, the blackboard was filled with a meticulously written outline loaded with multisyllabic medical terminology which the students also meticulously copied into their notebooks. Probably about 20 minutes was spent discussing snakebites, a topic of no relevance whatsoever for communities at a 4000-meter elevation. The more common problems involved in poisonings were not covered.

A lecture on family planning was given by a male midwife who worked at the hospital in Puno; it was part of a total of two hours in the curriculum devoted to pregnancy, deliveries, and family planning. Although he did give some misinformation (IUDs are pushed in Puno over

other methods, and he told the students they had no bad side effects), the students were very interested and asked very astute questions.

The army captain giving the lecture on civil defense (which he nicely narrated with the help of flip charts) was taken aback by one of the students, who berated the system for "being prejudiced against the Indian race" since it had been so slow in delivering disaster relief during the preceding year's drought. The students seemed very politically aware, and even organized themselves into committees to handle the administrative details of the course itself.

The promoters were very concerned that they would not get sufficient materials and medicines to use in their communities. They had sufficient reason to worry about this; one student questioned the value of the course if they were not provided with adequate supplies and medicines when they went back to their communities. They cited the example of another course they had heard of where the materials destined for the promoters had been diverted to the medical establishment, and they wrote a petition asking for a representative of USAID to come to their graduation to be sure they got the materials they were supposed to get.

The actual curriculum varied considerably from the theoretical design, largely for practical reasons and due to logistic difficulties. The coordinator of the course said she would have liked to take the students to surrounding Health Posts and Health Centers to do practical work, since the Acora Health Center was not large enough for all of the students, but there were no funds for transportation of this sort. Empty spots in the schedule seemed to get filled in with more first aid. The students seemed to prefer more practical, curative topics. One student expressed the opinion that they "weren't going to cure sick people with talks."

During the 30-day course, only two days were programmed for teaching outside the classroom: one day of practice at the Health Center and one day in a nearby village to watch (or participate in?) the construction of a latrine. The course seemed to allot teaching time more in accordance with the availability of instructors than with the relative importance of the subject for the promoters' work. For example, maternal and child health was allotted 10 hours, compared with 4 hours for the elimination of rabid dogs and 4 hours for the prevention of blindness. The real curriculum in practice was modified on a daily basis, and probably only vaguely resembled the curriculum on paper.

The cost of giving a promoter training course such as the one in Acora is in fact very low if one uses the totally inadequate figures of a 2,600 soles per diem and a 3,000 soles transportation allowance for each promoter, along with 4,500 soles* for each instructor. The actual budget for the 5-day refresher course that was to be held in Acora in late March 1984 was:

18 promoters x 5 days: 2,600 soles/day	234,000 soles
18 promoters round-trip travel: 3,000 soles	54,000 soles
16 instructor-days (2 full-time instructors plus part-time: 4,500 soles	72,000 soles
"Cost for One Course"	360,000 soles

* This equals approximately one-fourth of the standard per diem.

Thus, the total cost for a 5-day promoter training course would be 360,000 soles, or about US$144. Of course, this amount does not include teaching materials, but the teaching materials actually used do not usually amount to much more than a blackboard. The cost was calculated using the actual allowances used in Puno in March 1984. For comparison, the allowances used for promoter programs in Piura were: a transportation allowance of 30,000 soles and a per diem of 12,800 soles for the promoters. When the oversight in the Puno per diems is corrected, the more realistic cost for a 5-day promoter course will be about US$500, with the 30-day course being proportionately higher.

In summary, some specific observations on the Acora promoter training course are:

- The curriculum was modified on a day-to-day basis and bores only slight resemblance to the curriculum on paper.
- The emphasis of the course was more on curative medicine, which seems to coincide with student preferences.
- Although eager to learn, students were very occupied with political issues and materialistic concerns.
- Students' concerns about supply were justified by experience.
- There were only minimal opportunities for field experience or practical learning in the course.
- Teaching materials were minimal in practice, although theoretically available.
- Most teaching was didactic, and much of it was theoretical or of little practical relevance to the promoter's "need to know."
- The per diems for students were totally inadequate, and reflected a breakdown in the administrative system of the Ministry of Health and/or USAID.

4. Summary

Several promoter training course curricula were reviewed; three promoter training courses were actually observed; and nurses in charge of training courses in four different regions at district, area, and regional levels were interviewed. It appeared to the observer that a general lack of infrastructure and planning has taken its toll on the efficacy of promoter training programs. Both human and material resources are available but remain largely unused because of a lack of coordination and logistic support. Lack of the capacity to supervise promoters once they are trained makes training programs exercises in futility.

The concept of refresher courses and continuing education for practicing promoters exists but is inadequately and haphazardly implemented. An active national program now exists for training supervisors at different levels of the health system, eventually reaching down to the promoter, but the supervisors do not have the means to do supervision.

There are promoter training courses outside the Ministry of Health which are probably more efficacious, as they are coordinated with supplying the promoters with medicines and medical materials. Two such programs are those run by religious groups in Catacaos (Piura) and Juli (Puno). These are described in the health promoter case studies in the following chapter.

5. Conclusions

a. In the three courses that were actually observed in Cuzco and Puno, students were extremely enthusiastic and eager to learn, although their backgrounds and educational experience were often very disparate.

b. The instructors seemed to share this enthusiasm. There were adequate human resources to do the teaching, even in the rural areas.

c. A national curriculum and some regional curricula for promoter training already exist and not only look appropriate but are even extremely elaborate and detailed. However, these do not appear to have been designed from the position of practically defining the functions of the promoter.

d. Whereas basic curricula for promoter training have already been developed and are somewhat in use, most promoter training is in fact done on an ad hoc basis. Logistic realities require modification of the curricula on a day-to-day basis.

e. The actual total hours of training are somewhat theoretical and, for logistic reasons, were in fact often shortened.

f. Training materials were provided haphazardly with little advance planning. Logistic problems frequently interfered with the presentations of programs: e.g., no projector bulbs, no gasoline for transportation, no white drawing paper, no transportation for lecturers, etc. However, the materials did in fact usually exist; even expensive equipment and excellent teaching films are available. Many international donor organizations have resources which could be used, such as the superb public health newsletter published in Cuzco.

g. Different teaching methods were used, including some very practical ones, but the preponderance of teaching observed was didactic. The overall approach seemed to encourage theoretical learning for its own sake, at the expense of more practical information and skills.

h. There are many people working in health who have had experience in training programs and who are well aware of the advantages of participatory training. But these people have usually been shifted to other jobs, and the new training coordinators are unable to do much beyond didactic training.

i. It does not make much sense to train new promoters if there is no logistic or supervisory system to support them.

j. The per diem for the Puno courses were totally inadequate, whereas they may have been too generous in Piura, to the point of encouraging course participation solely to earn the per diem.

k. Some promoters seemed motivated enough to forego the per diem and pay for the expenses of their training themselves.

l. The promoter training courses are inconsistent from one region to another, and even within the same region.

m. The curricula (both in theory and in practice) do not really maintain an emphasis on maternal and child health.

n. Too much theoretical material is presented in promoter courses "just for knowledge," instead of emphasizing the practical knowledge of functions promoters actually need to know. Again, to make the promoter curriculum useful, the functions of the promoter must first be defined, perhaps in a much more narrow sense than has been done. And the definition should be at least regional.

o. No matter how long courses lasted, everyone thought they should have been longer. But long courses present problems for students and a more productive combination may be somewhat shorter initial courses with frequent follow-up refresher training and supervision, which is non-existent at present. The existence of a functioning supervisory system is an integral part of the training process; without it, training has little lasting value.

p. There is a general lack of travel funds for promoters and supervisors to get to and from training sessions and refresher courses, or for supervisors to get out to the field.

q. Although courses for supervisors are being given to teach them how to supervise (I attended one of these in Ica), lack of gas and appropriate reimbursement means that these supervisors rarely are able to put into practice what they have learned.

CHAPTER IV: THE PROMOTER AND THE COMMUNITY

One of the six main areas of concern driving this evaluation was the issue of adequacy of promoter selection. To answer this, it was necessary to know who promoters are, how they are chosen, what they do, and how they are prepared to do it; the relevant analytical questions that follow have to do with how well promoter selection and training fit with the Ministry of Health's objectives and associated norms for the promoter program. This chapter, primarily based on the promoter and community surveys, with ancillary illumination from case studies, is an attempt to answer these questions. Because of the volume of data generated by these surveys (see Chapter II), and for ease of reading, these data are presented here largely in narrative form, with a limited number of summary tables. The total printout of all important cross-tabulations is presented in Volume II. The reader is asked to remember that the regional sample selection was purposive but that promoters and communities were randomly selected. Thus percentages reported should be considered representative of the total universe of promoters, unless otherwise indicated.

A. Promoter Characteristics

1. Sex (Var. 9*)

Sixty-two percent of the total sample of promoters** are male, 38% female. There is significant variation by region, as indicated in Table IV-1.

TABLE IV-1
SEX OF PROMOTERS, BY REGION (in percentages)

Region	Male	Female
Piura-Tumbes	67	27
San Martín	91	9
Huánuco***	66	34
Callao	30	70
Ica	11	89
Arequipa	58	42
Puno	91	7
Ancash	83	17

* For ease of reference to tables, variable numbers are included.

** Percentages are rounded. Basic N=284. The number of missing cases will be reported where it relevant.

*** Huánuco-Cerro de Pasco-Ucayali.

Only in Callao and Ica is there a strong predominance of female promoters; in Arequipa and Huánuco, there is a more balanced profile by sex; the rest of the regional samples of promoters are dominated by males.

2. Age (Var. 10)

The majority (45%) of promoters are between 21 and 30 years of age; a slightly smaller percentage (35%) are between 31 and 40. Thus 80% of promoters are between 21 and 40. The distributions in these two age groups by region follow in Table IV-2. No single region has less than 70% of its promoter population in these two age groups and in half the regions (Callao, Puno, Huánuco, and Ica), 85% or more of the promoters are between 21 and 40. Additionally, in half the regions (Arequipa, San Martín, Callao, and Ica), 50% or more of the promoter

TABLE IV-2
AGE OF PROMOTERS, BY REGION (in percentages)

Region	Ages 21-30	Ages 31-40	Totals for the Two Age Groups
Piura-Tumbes	45.5	24	69.5
San Martín	51	20	71
Huánuco-Pasco-Ucayali	32	56	88
Callao	50	35	85
Ica	50	42	92
Arequipa	52	19	71
Puno	46.5	39.5	86
Ancash	31	41	72

population is in the younger (21-30 years) age cohort; these are all areas of substantial immigration. In San Martín, Huánuco, and Puno, most of the residue is found in the age group between 41 and 50; only Piura, Arequipa, and Ancash have any significant percentages of promoters in the over-50 cohort. It does seem as if regions with a more recent history of promoter activity or vigorous efforts at revival (e.g., Ica) tend to have younger promoters; there is some tendency for regions with deeper histories of promoter activity (e.g., Ancash) to have more older promoters, but the coincidence is quite imperfect.

3. Civil Status (Var. 11)

Sixty-three percent of all promoters are married, 20% are unmarried, and 14% are living in free union (see Table IV-3). This percentage of married individuals is higher than the national average for rural areas and somewhat surprising since marriage is not a central-level normative qualification (Ministry of Health, August 1983). At the regional level, the UNICEF-supported training program in

Ancash required that promoters be married or in stable union, so that region displays, with Arequipa (74%) and Callao (70%), a high percentage of married promoters (70%), Ancash because the requirement is normative, the others perhaps because of larger urban populations.

TABLE IV-3
PROMOTER CIVIL STATUS, BY REGION (in percentages)

Region	Married	Unmarried*	In Conjugal Union**
Piura-Tumbes	53	40	3
San Martín	60	17	23
Huánuco	54	3	37
Callao	70	17.5	5
Ica	61	39	--
Arequipa	74	13	6.5
Puno	60.5	14	19
Ancash	70	17	13

* "Soltero"
** "Conviviente"

High rates of conjugal unions in Huánuco, San Martín, and Puno are not inconsistent with their high percentages of indigenous populations.

Without precise statistical analysis, it is risky to be too insistent, but preliminary examination of the sex/civil status/age profile suggests that the typical promoter in each region is quite different. A likely profile for each region is as follows:

Piura-Tumbes	younger* male, married** or unmarried
San Martín	younger male, married or in conjugal union
Huánuco	older male or female, married or in conjugal union
Callao	younger female, married
Ica	younger female, married or unmarried
Arequipa	younger male or female, married
Ancash	older male, married.

It would appear, despite the lack of national norms requiring promoters to be in stable relationships, in fact these seem to be characteristic of the majority of promoters in all the regions surveyed. This may be a reflection of unwritten norms: nurses interviewed (see Chapter III) tended to mention stability of domestic relationship as a desirable promoter characteristic.

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* But with significant percentages in the over-50 cohorts.

** The status which appears first represents the higher percentage.

4. **Number of Children (Var. 12)**

It is of interest to those considering the role of the health promoter in family planning activities that promoters have large families for a group which tends to be youthful and probably of uncompleted fertility. Close to half (40.5%) have from four to seven children; over one-third (38%) have two to three; less than 5% have over eight children. Callao and Ica, as might be expected from their younger-female profile, are most likely to have promoters with no children or one child; promoter family sizes in Ica are the smallest for the sample as a whole. The heavily indigenous areas of Huanuco, Puno, and Ancash have the highest percentages of large families (4-7).

5. Socioeconomic Status (Var. 7)

In lieu of undertaking that most fragile endeavor -- gathering income data through multifocal surveys in regions largely dedicated to subsistence agriculture -- we decided to use a proxy indicator suggested by a number of researchers (cf. G. Murray, personal conversation) as reasonable: house flooring material. The guiding hypothesis is that dirt floors are generally associated with low incomes.

If one accepts this proxy, promoters as a group are more likely to be found in the lowest/lower income strata. Fifty-seven percent of the sample have dirt floors and 10% live in houses that are partially floored with dirt and partially with cement, a total of 67%. At the same time, 26% live in houses with cement floors, indicating a somewhat higher income level or at least the willingness to direct some available funds to improved domestic sanitation. Cement flooring also tended to be more frequent in Piura, Ica, and Arequipa, where urbanization and the range of its effects is greater. Wooden floors were most commonly found in the low jungle areas of Huanuco, as might be predicted. The highest percentages of dirt floors were found in Puno, Ancash, and San Martin, again predictable by the proportions of indigenous populations and the low incomes one expects for these groups.

6. Occupation (Var. 23)

The majority (55%) of all promoters work in own-account agriculture, 17% identify themselves as housewives, and 14% work in the informal or commercial sectors. As might be anticipated from their levels of urbanization, Ica and Arequipa have the lowest numbers of promoters who are agriculturalists. Piura, Ica, and Ancash have the highest numbers of informal-sector workers. Ica has, by far, the greatest numbers of promoters who identify themselves as housewives, quite congruent with the fact that its promoters tend to be females, married or unmarried. Callao has the largest number of promoters who are also teachers, but that number is small (see Table IV-4).

TABLE IV-4
PRINCIPAL OCCUPATION OF PROMOTERS, BY REGION (in percentages)

Region	Agriculturalists	Housewives	Informal or Commercial Sector
Piura	20.5	8.5	55
San Martín	31	4	5
Huánuco	31	13	8
Callao	30	17	8
Ica	4	45	52
Arequipa	18	13	11
Puno	35	--	8
Ancash	30	--	52

7. Language (Var. 15)

Of the total number of promoters interviewed, 53% spoke some language other than Spanish: 38% spoke Shipivo, and 1% spoke Aguaruna. As for the dominant language of the randomly selected communities in which promoters work, in 69% it was Spanish; in 18%, Quechua; in 10%, Aymara; and in 4%, Shipivo (2%) and Aguaruna (2%). Geographically, there was nothing remarkable: most of the Aymara communities were in Puno, with a couple in Ancash and Piura, and the Quechua-speaking communities were in Ancash, Puno, and Arequipa, with a few in Huánuco, Piura, and San Martín. Only in Callao and Ica were there no communities with a dominant language other than Spanish.

What is important from a program perspective is that Peru has not fallen into the mestization or ladinization trap of other Latin American countries with promoter programs and substantial indigenous populations. While the language requirement is not made explicit in most of the norms seen, the model set forth by the DSMIP in April 1983 (see Appendix K) requires that the promoter speak the language or dialect dominant in the locality. Even norms which do not specify language require that the promoter be a member or representative member (miembro/miembro representativo) of his or her community (DSMIP norms, April 1983) or be a native-born (natural) resident of the community (the UNICEF program in Region V/Ancash, a Quechua-dominant area). This specification is one of the few consistent dimensions of the very varied universe of VHW norms in Peru.

8. Residence in Community (Var. 14)

The normative expectation of well-established community residence appears to be only imperfectly realized. Of the total sample of promoters, 38% had lived in their communities between 26 and 70 years and 27% between 16 and 25 years, a total of 65%. Another 19% had lived from 6 to 15 years in their communities; 14% from 1 to 5 years, and 2% less than one year. These percentages produced a total of 35% of the promoters interviewed with five years or less of residence in

the communities in which they were functioning as promoters. Most of the newer (less than five years) residents were in San Martín and Arequipa, with slightly fewer in Huánuco, all areas of substantial immigration. Highest percentages of longer-term and lifetime residents were in Puno, Ancash, and Piura; the first two are not surprising because of their high frequencies of stable Aymara and Quechua communities, and Piura has relatively higher numbers of older promoters (see Table IV-5).

TABLE IV-5
TIME OF RESIDENCE IN COMMUNITY, BY REGION (in percentages)

Region	5 Years or Less	6 to 15 Years	16 Years or More
Piura-Tumbes	12.5	3	84*
San Martín	35	12	53
Huánuco	23	57	20
Callao	17.5	20	62.5
Ica	11	25	64
Arequipa	29	16	55
Puno	--	7	93
Ancash	4	11	86*

* Figures surpass or are less than 100% due to rounding.

9. Time Practicing and Initial Training as a Promoter (Vars. 25 and 29)

Fifty-seven percent of the sample had been promoters for from one to five years, 24% for less than a year, 19% for six years or more. Callao, Arequipa, and San Martín accounted for most of the very newest promoters, and Ica, Ancash, and Callao for most of the promoters practicing for from one to five years. By far the largest proportion (55%) of all promoters in practice for six years or more were encountered in Puno, to be expected in the "grandfather" site of promoter activities in Peru. Looking at frequency distributions over the whole sample, there were a number of small spikes at: two to three months (N=28 cases, or 10%),* six months (N=16/6%), one year (N=24/9%), two years (N=34/12%), three years (N=40/14%), four years (N=32/11.5%), and five and six years (N=29/10%). Almost all of these (95.5%) had been trained to be promoters since 1975: 41% in 1982, 1983, and the first two months of 1984; 28% in 1980 and 1981; and 27% between 1975 and 1979. Only 4% of all promoters had been trained before 1975. Distribution by region on this variable (29) is very erratic (see Table IV-6).

* Of 279 valid cases.

TABLE IV-6
INITIAL TRAINING OF PROMOTERS, BY REGION (in percentages)

Region	1975-79	1980-81	1982-84
Piura-Tumbes	5	2	19
San Martín	8	-	30
Huánuco	25	11	7
Callao	-	30	11
Ica	8	8	13
Arequipa	15	-	16.5
Puno	38	6	2
Ancash	-	43	2

Of all the promoters trained in the years 1975 through 1979, 38% were trained in Puno, 25% in Huánuco, and 15% in Arequipa. Of those trained in 1980 and 1981, 43% were trained in Ancash and 30% in Callao. And, of all the promoters in the sample trained in 1982, 1983, and the first two months of 1984, 30% were trained in San Martín, and 16.5% in Arequipa. Preliminary, non-statistical analysis indicated that training programs in San Martín and Callao since 1980 were more likely to have trained promoters who had not been long-time residents (five years or less) in their communities; Ancash was least likely. A reasonable explanation is that training programs in San Martín and Callao have simply had to deal with community situations which have entailed large numbers of migrants (e.g., pueblos jóvenes). A similar explanation would apply to Huánuco in the 1975-1979 period, when a number of the promoters trained were relatively new residents in their communities.

While these data have not been correlated with the actual numbers of promoters trained over the 1975-1984 period, it would seem that the regions most actively generating promoters between 1975-79 were Puno and Huánuco; in 1980-81, Ancash and Callao; and in 1982-84, San Martín, Piura-Tumbes, Arequipa, and Ica.

10. Promoter Health and Educational Background
(Vars. 24, 28, and 13)

The health and educational backgrounds of promoters provided some surprises:

28% had some member of their family who also worked in health
44% had worked in health before receiving training as a promoter
80% were presently continuing in that kind of health work
39% had completed primary school
20% had some (1-2) years of secondary school and
27% had completed secondary education.

We will discuss each of these in turn.

a. **Health background**

The breakdowns by region on variable 24, "any member of family working in health," suggest that this is an area where it would have been interesting to have had more detailed information. The percentages of promoters who had this sort of background did not correspond to what one might have hypothesized: that such family background would have been in traditional medical roles and therefore be found primarily in heavily indigenous areas. On the contrary, the highest proportions of promoters with other family member(s) working in health were in Callao (40%), Ica (39%), Arequipa (32%), and Huánuco (31%); the lowest percentages, 7% in Ancash and 16% in Puno, were precisely in the regions most notably characterized by indigenous cultures. We cannot, unfortunately, explain this.

As indicated, close to one-half of all promoters had worked previously in health. This varies by region. Table IV-7 ranks those percentages and compares these rankings with the percentages of promoters who had had some family member who worked in health. Again, Ancash and

TABLE IV-7
PERCENTAGES OF PROMOTERS WHO WORKED IN HEALTH, COMPARED WITH PERCENTAGES OF PROMOTERS WITH SOME FAMILY MEMBER WHO WORKED IN HEALTH, BY REGION

Promoter Had Worked in Health, Before Promoter Training			Promoter Had Some Family Member Who Worked in Health	
%	Rank	Region	%	Rank
68	1	Arequipa	32	3
58	2	Piura-Tumbes	29	5.5
53	3	San Martín	29	5
53	3.5	Ica	39	2
46	4	Huánuco	31	4
28	5	Callao	40	1
26	6	Puno	16	6
26	6.5	Ancash	7	7

Puno have the lowest percentages of health background (family or own experience); Huánuco, Arequipa, San Martín, and Ica stay approximately at their same rankings; only Callao shows a major difference, with relatively little own experience but the highest percentages of family members who worked in health. While the data lack detail and might profit from the application of formal correlation procedures, it would appear that there are some relationships among family health work background and own-health work background which are characteristic of promoters in general. In broad terms, promoters frequently emerge from some kind of previous family involvement in health work. This is not, however, a criterion or norm for promoter selection.

The sorts of health work promoters have done is diverse; the largest percentage (26%) of those with previous health experience (N=125) fell into the "other" category, followed by experience in the army (22%), activity as a curandero (17%), comite de salud membership (12%), and experience as an auxiliar de enfermeria (11%). Most of this experienc, is in the modern subsector** (34%), followed by the traditional subsector* (28%), and by experience at the community promotion level*** (as opposed to practice) (12%). These are disaggregated by region in Table IV-8.

TABLE IV-8
PROMOTERS' PREVIOUS HEALTH EXPERIENCE BY SUBSECTOR, BY REGION (N=125)

Region	Traditional Subsector*	Modern Subsector**	Community Subsector***
Piura	75	48	33
San Martín	21.5	30	13
Huánuco	85	24	13
Callao	26	18	--
Ica	--	13	13
Arequipa	61	38	13
Puno	38	31	13
Ancash	69	7	--

* Curandero, yerbatero, partero, huesero.
** Army, auxiliar de enfermería.
*** Comité de Salud member.

Most of the promoters with experience in traditional medicine come from Huánuco, Piura, and Ancash; those with experience in modern medicine are primarily from Piura and Arequipa. It must be remembered that absolute numbers are not large -- the total N of promoters with any previous experience in health was 125 -- so that we are, for example, talking about a total of 35 (12%) promoters out of the total sample of 284 who had experience in traditional medicine, and 42 (15%) with experience in modern medicine. However, since the MOH does not actively recruit according to a previous-health-experience norm, these numbers represent an interesting process of self-selection which the Ministry might capitalize on. In Chapter III there is a discussion of institutional attitudes toward recruiting curanderos, including the theory that curanderos would neither satisfy the educational prerequisite for promoter status nor be interested in it. This is not altogether clear; although the numbers are not overwhelming, the fact that 12% of the promoter sample have been chosen or chosen themselves for the THP population suggests both interest and an appropriate level of preparation.

b. Educational background

One of the biggest surprises in the study -- and one that should provoke some hard thinking about promoter role and system incentives -- is the high educational levels characteristic of the promoters as a group. To repeat, 39% of all promoters had completed five primary school grades, 27% had completed secondary school, and 20% had one to two years of secondary school. Table IV-9 presents these data by region.

TABLE IV-9
PROMOTER EDUCATIONAL LEVELS, BY REGION (in percentages)

Region	5 Primary Grades	1-2 Grades of Secondary School	Completed Secondary School	Total with Any Secondary School
Piura-Tumbes	10	9	15	24
San Martín	13	20	8	28
Huánuco	21	7	7	14
Callao	13	13	21	34
Ica	--	2	31	33
Arequipa	12	13	9	22
Puno	19	24	8	32
Ancash	12	13	1	14

B. Promoter Selection Process

1. The Process (Var. 41)

By far the most common mode of promoter selection was the Community Assembly (Asamblea Comunal). Fifty-three percent of all promoters were selected, or at least approved, in such a forum. As discussed in Chapter III, the Assembly often functions as a rubber stamp on a previous selection made by community leaders; in some cases, the leadership does pre-select a pool of promoter candidates, to be voted upon in open assembly. When all community-based selection processes* are combined, the total percentage rises to 82%. There is little doubt that promoters are chosen by the communities in which they live, or by or through some component of the community power structure, rather than by any external entity such as (most importantly) the Ministry of Health, the army, or the Church. The few variations in or

* Contest (concurso), followed by Health Committee (Comité de Salud) selection, Asamblea plus representative(s) from the Ministry, Asamblea Comunal, and Health Committee.

from this standard procedure were found in Ancash, where 86% (N=25) of the promoters were chosen in Asamblea Comunal with some Ministry of Health member present; Callao, where 35% of those selected were chosen by local authorities in what was reported to be a somewhat coercive fashion; and Arequipa, where intraregional variability in the selection process was most apparent and suggests substantial diversity of norms. The representative assembly selection process is specified as an administrative norm by the MOH, and adherence to this specification is well distributed; with the exception of Callao, there are no important divergences from the norm.

2. Reasons for Selection (Var. 42)

Far and away the most important selection criterion for communities, in the promoter's view, was knowledge (conocimientos), which accounted for 40% of the selection criteria mentioned. This was followed in importance by being "responsible and good" (responsable y bueno) (22%) and perceived interest in helping the community (8%). When the responses related to experience* are added, knowledge-cum-experience accounts for 45% or almost half of the communities' rationale for promoter selection, as perceived by the promoter. Again, there was little meaningful divergence from this pattern by region, except for Callao, where "coerción" was given as a reason for promoter selection.

C. Promoter Preparation (Vars. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 43, 44, 45, 46, 47)

The dates of the promoters' initial training were discussed above in Section A.9. For most promoters (41%), duration of that first training was from 30 to 44 days; a smaller percentage (21%) received from 45 to 60 days of training, and the rest were scattered more or less evenly among 15-29 days, 1-14 days, 61-90 days, and 91 days or more, in that descending order of frequency.

Shorter training courses were typical of the Ica region, where 82% of all the first training reported by promoters was of 1-14 or 15-29 days' duration. There were no other notable exceptions.

For the overwhelming number of promoters (86%), the Ministry of Health (and its several entities) was the source of their first training. Forty-one percent of the promoters said they had been trained by the local or regional (MOH) hospital, 30% simply said that the Ministry of Health had provided their training, 14.5% said they had been trained at a Health Center, and 1% said they had been trained by AID. The remaining 14% had been trained by an "academy or institute" (4.5%), some foreign organization (3%, in Piura and Arequipa), a religious group (2.5%, in Huánuco and Puno), or by the army (2%, in Piura,

* "Labor desempeñada" and "trabajo como auxiliar."

Huanuco, and Puno).* Respondents in San Martín and Ica were more likely to attribute their first training to the MOH than those in other regions, but there were no other differences that appeared relevant.

After this initial training, no more than 83 (29% of the total promoter sample of 284 and 34% of the 241 who had indicated receiving initial training) had received a first refresher course. Most (43%) of these courses lasted from 6-10 days, a slightly smaller percentage (39%) lasted 1-5 days, and only 18% (15 cases) had had a refresher training course that was over 10 days long. The shortest courses were more typical of the Puno region than of any other, while the middle-range courses were typical of Ancash. The total frequencies of promoters who had received first refresher courses varied widely, as seen in Table IV-10, from none reported by the San Martín promoters to the 29% of all refresher courses accounted for by Puno. Of the total universe of first refresher training for the promoters sampled, 81% was given in the regions of Puno, Ancash, Huánuco, and Piura. Again the dominant responsible entity was "the Ministry of Health" (19.5%) or one of its local hospitals (55%) or Health Centers (7%), a total of 82%, close to the 86% reported for sponsor of first training. The remaining 14% was accounted for by national, international, and private voluntary agencies including UNICEF, CIPCA, and the Hospital Amázonico. Seventy-eight percent of this training occurred in 1982-1983 and the first two months of 1984, with another 12% in 1980 and 1981, so that 90% of all refresher training is of very recent vintage.

TABLE IV-10
PROMOTERS RECEIVING A FIRST REFRESHER COURSE,
BY REGION (in numbers and percentages) (N=83)

	Numbers	Percentages of All Refresher Courses
Piura-Tumbes	13	16
San Martin	0	0
Huanuco	14	17
Callao	4	5
Ica	4	5
Arequipa	8	10
Puno	24	29
Ancash	16	19

As for promoters who have received a second dose of continuing education (Vars. 32 + 34, 38-40) their numbers are small: there were 36 promoters who reported receiving a second training course and 19 who reported receiving a second refresher course. Because of the short durations reported for some of the second training courses, there is

* Additional responses (under 1% of cases each) were: correspondence courses, a doctor, and political parties.

some question about whether these might not more appropriately have been called "refresher courses," although promoters understood quite well the intent of refresher training (Var. 45).* If these are lumped together as a second wave of training, the sum of 55 amounts to under 20% of all promoters sampled. Eighty percent of the promoters said that they had not gone for refresher courses because those had not been offered (Var. 47).

As for the quality of training (Var. 43), 72% of the promoters perceived it as "adequate" to the task of addressing community health problems. There was some regional variation on this score: the greatest percentages of positive assessments of the adequacy of training were in Callao (95% positive), Ancash (86%), and Piura (81%). Lower values appeared in Puno (78%), Huánuco (77%), Arequipa (71%), Ica (67%), and San Martín (62%). Since Ica has been a model project, the fact that it received a relatively low ranking by promoters trained there gives pause.

The promoters as a group were quite articulate about what they thought they needed to confront the health problems of their communities. They provided 15 categories of freely-elicited response to this question, of which nine had to do with some kind of support from the public health system. These sorts of responses displayed the highest frequencies, as follows:

1) Training (33% of respondents)
2) Medicines (15.5%)
3) First aid materials (12%)
4) Professional support (8%)
5) Health post construction (7%)
6) Coordination with community groups (7%).

The highest percentages were well distributed across regions, with no variations that command attention.

D. Promoter Activities (Var. 48)

One of the major requirements of the Scope of Work was that the evaluation produce "a list of activities performed by promoters, i.e., job description, including the amount of time devoted to carrying out these activities." This section responds to that requirement, primarily in quantitative terms; qualitative data and discussion on promoter activities are provided in Chapters III and V.

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* Forty percent of promoters saw the purpose of refresher training as not forgetting what was learned in training courses, 20% as acquiring new knowledge and expanding existing knowledge, and 20% as updating learned knowledge and skill. Only one person (in Piura) saw it as having a supervisory aspect.

An obvious correlate of promoter activities is the level of knowledge promoters have acquired in order to perform those activities. Other, perhaps less obvious, correlates are the different kinds of support to which promoters have access for that performance, including manuals and audiovisual materials, equipment, pharmaceuticals and pharmaceutical supplies, supervision, training in specific subject matters, and financial and other incentives. Each of these will be discussed in turn.

In the survey questionnaire administered to the sample of promoters, a set of questions was asked about a series of possible promoter activities (question D.13); other questions (D.1 through D.35, F.1 and F.2, and G.4 through G.9) about promoter activities were asked as controls and probes of particular areas of concern, e.g., management of infant diarrheas and family planning.

Table IV-11 presents a summmary of promoter activities. In essence, it answers the question: "What numbers and percentages of promoters surveyed said that they performed the following health-related tasks?":*

1) Organized home gardens (P)
2) Organized community meetings (P)
3) Undertook activities in solid waste disposal (P)
4) Did first aid (C)
5) Provided pre-natal care (control de embarazadas) (P)
6) Referred newborns for birth registration (registro civil) (P)
7) Did injections (C)
8) Provided care to children with diarrhea (C)
9) Gave educational talks (charlas) (P)
10) Counseled pregnant women on nutrition (P)
11) Referred tuberculosis cases (P/C)
12) Collaborated in vaccination campaigns (P)
13) Did thick smears (gota gruesa) for malaria (P)
14) Reported rabid animals (P)
15) Taught mothers about lactation and weaning (P)
16) Provided family planning guidance (P).

Promoters were also asked more detailed probe questions about whether they performed the following activities:

17) Helped community install latrines (P)
18) Helped community install potable water (P)
19) Did patient referrals (P/C)
20) Attended childbirths (C)
21) Provided family planning supplies (P)
22) Worked with community health committee (P).

These are discussed below, regrouped as preventive (P) and curative (C) interventions; those which can be viewed as both preventive and curative (P/C) are dealt with here as preventive. Within each grouping, these activities are re-categorized by health focus.

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* Each task is designated as preventive (P), curative (C), or both preventive and curative (P/C).

CROSSTABULATION

VARQ01 REGION DE SALUD
BY ACTIVI (GROUP) ACTIVIDADES NRO. 1

TABLE IV-11

SUMMARY OF PROMOTER ACTIVITIES, BY REGION
(numbers and percentages)

ACTIVI

RESUMEN, ACTIVIDADES DEL PROMOTOR, POR REGION

VARQ01	COUNT / COL PCT	huertos GARDENS 1	reuniones MEETINGS 2	excreta SOLID WASTE 3	prim.aux. 1st AID 4	prenatal PRENATAL 5	reg.nacim. BIRTH REG. 6	inyeccion INJECT 7	diarrea DIARRHEAS 8	ROW TOTAL
PIURA-TUMBES	1	8 13.1	23 13.1	14 8.6	27 11.4	11 9.3	11 7.3	28 12.8	24 11.0	28 11.7
SAN MARTIN	2	13 21.3	32 18.3	23 14.2	31 13.5	11 9.3	22 14.7	35 16.0	30 13.7	35 14.6
HUANUCO-PASCO-JUNIN	3	6 9.8	23 13.1	20 12.3	29 12.7	12 10.2	20 13.3	27 12.3	28 12.8	29 12.1
CALLAO	4	5 8.2	9 5.1	12 7.4	33 14.1	7 5.9	10 6.7	26 11.9	25 11.4	34 14.2
ICA	5	3 4.9	21 12.0	25 15.4	27 11.8	23 19.5	22 14.7	22 10.0	27 12.3	27 11.3
AREQUIPA	6	3 4.9	14 8.0	17 10.5	24 10.5	10 8.5	17 11.3	22 10.0	24 11.0	25 10.5
PUNO	7	15 24.6	28 16.0	32 19.8	32 14.0	27 22.9	26 17.3	30 13.7	32 14.6	32 13.4
ANCASH	8	5 8.2	25 14.3	19 11.7	29 12.7	17 14.4	22 14.7	29 13.2	29 13.2	29 12.1
	COLUMN TOTAL	61 25.5	175 73.2	162 67.8	229 95.8	118 49.4	150 62.8	219 91.6	219 91.6	239 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

239 VALID CASES 45 MISSING CASES VARS. 80, 84, 88, 92, 96, 100, 104 and 108.

* * * CROSSTABULATION * * *

VARO01 REGION DE SALUD
MY ACTIVS (GROUP) ACTIVIDADES NRO. 2

TABLE IV-11 (conc.)

SUMMARY OF PROMOTER ACTIVITIES, BY REGION
(numbers and percentages)

RESUMEN, ACTIVIDADES DEL PROMOTOR, POR REGION

VARO01	COUNT / COL PCT	TALKS charlas	PREG/NUTR. nutr./amb.	TB REF. trans.TB	VACCIN. vacunas	MALARIA malaria	RABIES rabia 6	LACTATION lactacion	FAM.PLAN. plan.fam.	ROW TOTAL
PIURA-TUMBES	1	20 10.6	21 12.0	15 11.0	25 14.0	23 33.8	12 9.3	18 11.2	16 11.0	28 12.0
SAN MARTIN	2	31 16.4	21 12.0	20 14.7	19 10.7	20 29.4	17 13.2	17 10.6	14 9.6	34 14.6
HUANUCO-PASCO-UCAYAL	3	21 11.1	19 10.9	17 12.5	23 12.9	13 19.1	10 7.8	18 11.2	15 10.3	28 12.0
CALLAO	4	21 11.1	16 9.1	11 8.1	22 12.4	3 4.4	17 13.2	14 8.7	18 12.3	31 13.3
ICA	5	23 12.2	27 15.4	17 12.5	19 10.7	4 5.9	18 14.0	25 15.5	27 18.5	27 11.6
AREQUIPA	6	17 9.0	19 10.9	15 11.0	12 6.7	[illegible]	14 10.9	19 11.8	15 10.3	24 10.3
PUNO	7	31 16.4	29 16.6	29 21.3	29 16.3	2 2.9	25 19.4	27 16.8	23 15.8	32 13.7
ANCASH	8	25 13.2	23 13.1	12 8.8	29 16.3	1 1.5	16 12.4	23 14.3	18 12.3	29 12.4
	COLUMN TOTAL	189 81.1	175 75.1	136 58.4	178 76.4	68 29.2	129 55.4	161 69.1	146 62.7	233 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

233 VALID CASES 51 MISSING CASES

VARS. 112, 116, 120, 124, 128, 132, 136, and 140.

1. Promoters' Preventive Activities

a. General community health education and the role of the Community Health Committee (Comité de Salud)

Seventy-three percent of all promoters responding* reported that they organized community meetings for health promotional activities (Var. 84). Eighty-one percent of promoters responding reported that they gave health talks (charlas) to their communities (Vars. 48 and 112). However, percentages varied substantially by region. The lowest showing was Callao, with only 59.5% of responding promoters reporting that they gave charlas; the high was Puno, with 100%. In the intermediate range, in ascending order, were Piura-Tumbes (65.5%), Arequipa (67.9), Huánuco (82.8), Ancash (89.7), San Martín (91.2), and Ica (92.6), the second highest percentage.

Promoters use a variety of ways to try to pull the community or parts of it together for health education (Var.49): public notice, advisory, or summons (citaciones)(24%); coordination with the directiva of the local Health Committee (Comité de Salud) (21%); regular assembly (Asemblea Ordinaria) (19%); and personal contact (17%). Promoters in Huánuco and Ica appear more likely to resort to citaciones, San Martín and Ancash to coordinate with directivas, and Puno to use the Asamblea route; Ica is also likely to use personal contact to promote health education sessions.

The role of the health committee is of primary interest to the Ministry of Health, since among the various norms and job description components of the promoter role, the concept of the health committee and the promoter's responsibilty for responding to it, forming it, and/or participating in it has been central. Whether the promoter role is predominantly curative or preventive, the argument is that the Comité de Salud, or something like it, is pivotal in the implementation of extension of coverage.

Despite some uneasy responses during the pre-test of the promoter survey instrument, it appears that the large majority (86% of respondents and 72% of the entire promoter sample) of promoters do know what a Comite de Salud is (Var. 252). There is some variation in levels of knowledge, from a low of 73% of respondents in Puno to a high of 100% in Piura-Tumbes. There is some imperfect correlation between levels of knowledge about what a health committee is and whether there is a health committee in the promoter's own community (Var. 253). In general, the tendency is toward higher levels of knowledge about what a health committee is than it is toward having a functioning health committee in the promoter's own community.

Beyond the issues of "knowledge" and "presence" is the question of whether promoters actually work with such committees (Var. 254) and/or were involved in their creation (Var. 256). There is some interesting history which unfolds when these data are arrayed side by side, as they are in Table IV-12. While the progressions are not completely smooth in percentage terms at the regional level, the numbers are fairly straightforward and strongly suggest that: a) most promoters know what a Comite de Salud is; b) although the percentage of respondents (80%) is quite high, the number of promoters who have actually collaborated in the establishment of a health committee is quite low (122, or 43% of the entire promoter sample); c) the numbers

of committees still functioning mean that 63.5% of promoter respondents have such a resource at their disposal, equilvalent to 51% of the entire sample surveyed.

One must wonder why more promoters do not or have not continued to work with their community health committees. The promoters' explanations for this (Var. 255) should be a matter of concern and be directly linked to policy considerations. Their thrust is that communities are simply not motivated enough by what the promoter has to offer or are not convinced that continuing to work joining together for health purposes will be sufficiently productive to warrant the effort:

1)	Not interested	30.2%
2)	Don't meet	18.6
3)	Don't want to collaborate	16.3
4)	Can't agree	9.3
5)	Don't have time	7.0
6)	Simply stopped functioning	4.7.

These percentages account for 86% of all responses, elicited through open-ended questioning; only 12% of respondents reported in a more positive direction, with information that "their" health committee was only recently formed and was not yet off and running. Questions (Vars. 257 through 265) about committee membership threw no additional light on the reasons for this generally tepid performance. The bulk of promoter responses indicated that the comittees were composed of community members (gente de la comunidad), with little specific identification of community leaders, comerciantes, livestockmen, or other types who might be at the upper levels of the community power structure. This may be more a function of the open-ended question style ("Who are members of the health committee and what do they, as a committee do?") than it is of anything else.

As for promoters' perceptions about what health committees actually did, those are reflective of the same limited participation suggested above. Twenty-eight percent of promoters responding about the activities of the health committees, where these existed, reported that they did nothing. Fifty-two percent reported that their committees did do something, including: eliciting help from the rest of the community, watchdogging (vigilar) health services, and supporting community projects. Only 3% of promoters reported that their communities had built a Health Post or locale for them and only 3% of communities procured medicines. In only a minuscule number of cases was the community or the Comité de Salud responsible for the community medicine chest (botiquín comunal), to be discussed in detail later.

As for frequency (Var. 50), 35.5% of all respondents stated that they had given their most recent charla over 90 days ago; 33% reported charlas one to two months ago. The rest of the responses were fairly well scattered over the more recent time period: 9%, one to seven days ago; 5%, eight to fourteen days ago; and 16%, 15-30 days ago. Thus almost 70% of the promoters responding had not given a health talk more recently than a month ago. The more compelling figure is the almost 36% of all promoters who had not done any organized group education work for over three months; the largest numbers of these were in Huánuco, Ancash, and San Martín.

TABLE IV-12

COMPARISON OF PROMOTER KNOWLEDGE ABOUT HEALTH COMMITTEES, INVOLVEMENT IN COMMITTEE CREATION, CURRENT WORK WITH COMMITTEE, AND CURRENT EXISTENCE OF COMMITTEE IN COMMUNITY, BY REGION (numbers and percentages)

Region	(Var 252) Promoter Knows what a Health Comm. Is		(Var. 256) Promoter Collaborated Est. of Committee		(Var. 254) Promoter Currently Wkg. with Comm.		(Var. 253) Committee in Existence	
	no.	%	no.	%	no.	%	no.	%
Piura-Tumbes	28	100.0	20	83.3	18	72.0	23	82.1
San Martin	26	78.8	15	83.3	15	75.0	19	57.6
Huanuco	24	85.7	11	84.6	10	76.9	13	52.0
Callao	28	77.8	7	63.6	6	42.9	11	31.4
Ica	27	100.0	17	70.8	13	56.5	22	81.5
Arequipa	23	92.0	13	65.0	13	68.4	18	72.0
Puno	22	73.3	19	90.5	20	90.9	20	71.4
Ancash	26	89.7	20	95.2	14	70.0	20	69.0
Totals*	204	86.4	122	80.3	109	69.9	146	63.5

* Totals of all promoters who responded to these questions.

There is also variation in the degree to which certain subject matters are dealt with in health talks. Promoters were asked about the themes which they had addressed in health talks over the last six months. Of the 189 responses (of which some were multiple),* the themes most often addressed were, in descending order of frequency: environmental sanitation, personal hygiene, transmission of infectious diseases, maternal/child health, responsible parenthood (paternidad responsable),** and nutrition (Vars. 468 through 474) (see Table IV-13). We will follow this order of frequency in these next sections on promoter activities, to determine the extent to which frequency of each activity coincides with its importance as indicated by health talks and meetings.

b. Environmental sanitation

Fifty-three percent of promoters reported the presence of some latrines in their communities. The largest number (45% of cases) had one to five latrines, and 24% had over 20. Without correlation with community size, these figures are virtually meaningless. However, together with the data on water source -- about half the promoters depended on some natural source of unproved purity and a minority had access to well or piped water -- the environmental profile of promoters' communities is what one would expect from national environmental sanitation data: poor. One hundred and sixty-five promoters (58% of all surveyed) said that they had helped their communities build latrines (Var. 53). The numbers built were not large: 45% (74 cases) of those had helped build only one latrine, 35% had helped build two to five, 5.5% six to ten, 9% eleven to twenty, and 5.5% over 20. Again, lack of activity is attributed (Var. 54) mostly to lack of community interest or support (39%), partly to lack of money (30%) and, in lesser degree, to ecological problems*** (18%). Most of the latrine-building that did occur was in San Martín, which accounted for 21% of all the promoters reporting this activity, followed by Puno (16%), Arequipa (14.5%), and Piura and Ica (13% each). Little activity in this area was reported for Huánuco, Callao, or Ancash. One hundred sixty-two promoters (68% of respondents and 57% of all promoters surveyed) collaborated in community efforts at solid waste disposal (refer back to Table IV-11).

As for installation of potable water (Var. 56), only 28% of respondents (N=212) indicated that they had helped with the installation of potable water in their communities; this represents 21% of the total promoter sample. Promoters in Puno and Callao were

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* Due to promoters who had given more than one charla over the period, or to charlas which included more than one theme (see Chapter V for discussion of the over-reporting this can produce).

** This is an early euphemism for 'family planning' which, according to survey data to be presented later in this chapter, is little understood or used by most promoters.

*** Soil, topography, climate.

* * * CROSSTABULATION * * *

VAR001 REGION DE SALUD
MY CHARLAS (GROUP) CHARLAS - TEMAS

TABLE IV-13

THEMES, HEALTH TALKS, BY REGION

TEMAS, CHARLAS SALUD, POR REGION

VAR001	COUNT / COL PCT	CHARLAS: san.amb. ENV.SAN. (1)	hig.pers. PERS.HYG. (2)	mat.-inf. MCH (3)	pat.resp. PAT.RESP. (4)	nutricion NUTRITION (5)	enf.cont. INFEC.DIS. (6)	otros OTHER (7)	ROW TOTAL
PIURA-TUMBES	1	12 10.9	9 10.8	6 10.9	1 2.2	5 11.1	12 17.1	1 2.0	20 10.6
SAN MARTIN	2	19 17.3	10 12.0	5 9.1	3 6.5	5 11.1	8 11.4	4 8.2	30 15.9
HUANUCO-PASCO-JCAYAL	3	12 10.9	13 15.7	4 7.3	4 8.7	4 8.9	4 5.7	4 8.2	22 11.6
CALLAO	4	6 5.5	10 12.0	1 1.8	2 4.3	4 8.9	6 8.6	14 28.6	19 10.1
ICA	5	11 10.0	3 3.6	11 20.0	21 45.7	5 11.1	7 10.0	5 10.2	25 13.2
AREQUIPA	6	8 7.3	5 6.0	3 5.5	3 6.5	6 13.3	7 10.0	1 2.0	15 7.9
PUNO	7	22 20.0	15 18.1	14 25.5	8 17.4	6 13.3	15 21.4	14 28.6	32 16.9
ANCASH	8	20 18.2	18 21.7	11 20.0	4 8.7	10 22.2	11 15.7	6 12.2	26 13.8
	COLUMN TOTAL	110 58.2	83 43.9	55 29.1	46 24.3	45 23.8	70 37.0	49 25.9	189 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

189 VALID CASES 95 MISSING CASES VARS.: 468, 469, 470, 471, 472, 473, 474

the most active in this enterprise, with 29% and 20% of reported cases, respectively; there was no activity in this area reported for San Martín or Huánuco. The single largest contribution by promoters in this regard was, surprisingly, labor (mano de obra). This is not to say that promoters were not active in teaching the importance of clean water (18.5% of cases) or in promotion (forming commissions, 9%; taking measures/haciendo gestiones, (12%); or working with health committees, (15%). Our theory is that there may be less of a requirement for the promoter to proselytize clean water, since it appears to be a well-perceived need in rural and marginal urban communities and the promoter is expected to pitch in and work just like anyone else. The number of cases is small, to be sure, but data from other survey components suggest that the theory is plausible.

c. Prevention of infectious diseases*

Table IV-11 also shows that:

- 76% of promoters collaborate in vaccination efforts -- primarily campaigns (Var. 124).
- 58% of promoter respondents refer patients with tuberculosis to higher levels of care (Var. 120).
- 55% report rabid animals to the appropriate local/ health authority (Var. 132).
- 29% take thick smears (gota gruesa) for identification of malarious cases (Var. 124).

These figures suggest that promoters represent a real resource for vaccination campaigns, a finding which concurs with the opinions of the health establishment itself (see Chapter III). However, the percentages for TB referral and rabies notification appear mediocre. These are, to be sure, circumstantial -- if there is no TB and no rabid animals, there can be no promoter activity. Still, given high TB rates in Peru, one might have expected more action. As for malaria, most of this activity occurs in Piura-Tumbes, San Martín, and Huánuco, with almost none in the other five regions. In the absence of relatively fine-grained epidemiologic data on infectious disease prevalence, we cannot make any reliable statements about the appropriateness of the level of promoter activity to epidemiological needs.

d. Maternal/child health

Less than half (49%) of respondents said that they provided prenatal care (control de embarazadas) to pregnant women (Var. 96), although 75% said they provided guidance to pregnant women on proper nutrition (Var. 116), and 69% said they taught mothers about breastfeeding

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* For convenience, vector-borne diseases are included here.

and management of weaning (Var. 136). Sixty-three percent said they referred newborns for civil registration (Var. 100). There is some variability among regions which merits comment (see Table IV-14). In general, Puno, Ica, and Ancash, in that order, appear to have more promoters who do more in preventive maternal/child health care than do other regions. It is of particular interest that these regions' promoters do provide control de embarazadas, despite the conviction among some doctors at upper institutional levels (see Chapter III) that this activity is the province of the trained TBA or should be referred to the Health Post level. The entire MCH role of the promoter, preventive and curative, will be reviewed at the end of this chapter.

e. Nutrition

Beyond the nutritional counseling referred to in the preceding section, the only other nutrition-related activity data* gathered in the survey were on the organization of family gardens (huertos) (Var. 80). Only 25.5% of respondents reported that they did or had done this (see Table IV-11).

f. Family planning

Sixty-three percent of respondents said that they provided family planning guidance (Var. 140), primarily in Ica and Puno. Actual distribution of supplies, however, is very sparse. Only 36 out of 193 respondents (18.65%) reported distribution of any family planning commodities (Var. 247); that is equivalent to 12.7% of the entire promoter sample surveyed. Of the 36, 27 (75%) are in Ica, where those promoters distribute condoms, pills, and vaginal tablets, though not all distribute all of these; the customary kit for these promoters seems to be pills and condoms, but frequencies are too minuscule to report.

This is not because promoters do not know what family planning is or because they are not asked by their communities for such help. While the overwhelming majority (70%) of the entire sample did not accurately understand the term "responsible parenthood" (paternidad responsable),** 63% knew what the term "family planning" meant (Var. 245). Nevertheless, it is a matter of concern that approximately 37% of the whole surveyed sample either could not provide a satisfactory definition or were unable to answer at all. Highest levels of ignorance in this regard were, in descending frequency, in San Martín, Huánuco, and Piura, precisely where there was the least distribution of family planning commodities; levels of understanding in Ancash, Callao, and Ica were the highest.

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* Unfortunately, no question was included on the participation of promoters in PL-480 food distribution. There were unelicited indications in the surveys and case studies that some promoters did help with this, but we cannot quantify it.

** Some of the interpretations offered were: "to educate one's children," "to provide love and understanding," and "to keep the father home with the family."

TABLE IV-14
PROMOTERS' REPORTED PREVENTIVE ACTIVITIES IN MATERNAL/CHILD HEALTH CARE, BY REGION (in numbers and percentages*)

Region	Activity: (Var. 116) Nutr. Guidance to Pregnant Women		(Var 136) Guid. on Lactation and Weaning		(Var. 100) Referral for Civil Registry		(Var. 96) Prenatal Care*		Totals**	
	no.	%	no.	%	no.	%	no.	%	no.	%
Piura-Tumbes	21	12.0	18	11.2	11	7.3	11	9.3	61	10.1
San Martín	21	12.0	17	10.6	22	14.7	11	9.3	71	11.75
Huánuco	19	10.9	18	11.2	20	13.3	12	10.2	69	11.4
Callao	16	9.1	14	8.7	10	6.7	7	5.9	47	7.8
Ica	27	15.4	25	15.5	22	14.7	23	19.5	97	16.1
Arequipa	19	10.9	19	11.8	17	11.3	10	8.5	65	10.8
Puno	29	16.6	27	16.8	26	17.3	27	22.9	109	18.1
Ancash	23	13.1	23	14.3	22	14.7	17	14.4	85	14.1
Totals	175	75.1	161	69.1	150	62.8	118	49.4	604***	100.0

* Percentages are of tatal number of respondents.

** Control de Embarazadas.

*** Sums to more than basic number of respondents due to multiple responses.

Promoters were nonetheless aware of local demand for family planning information. Fifty-six percent of respondents said that they had been asked for such information, although a not inconsequential percentage (44%) said they had not. This suggests the need for a sizeable task of promotion, perhaps especially in San Martín, Piura, and Callao where, probably not for the same reasons, demand for family planning information from promoters was lowest.

2. Promoters' Curative Activities

These will be addressed in descending priority, ordered by the percentages of respondents who said that they performed these activities. That order is : first aid (atención de primeros auxilios), injection (aplicación de medicamentos injectables), care of children with diarrhea (cuidado de niños con diarrea), referrals (transferencias de pacientes), and birth deliveries (atención a partos).

a. First aid

Ninety-six percent of respondents answered that they provided first aid services to their communities (Var. 92 see Table IV-11). In terms both of numbers and percentages, there was no notable variation by region.

b. Injections

Ninety-two percent of respondents said that they did injections (Var. 104). Again, there was little variation by region, with only San Martín showing slightly higher absolute numbers and percentages of promoters doing injections. Promoters were asked how many injections they had done over the last month (Var. 342) and which injectables they used most (Vars. 343, 345, 347, 349, and 351). Thirty-one percent reported doing two to five per month, 25% reported six to ten, and 22% reported eleven to twenty. Thus, 78% of all respondents were doing at least two injections per month and some as many as twenty. Another 19% were doing from 21 to over 30 injections a month, or an average of one per working day.

As measured by sheer frequency of mention, there were three injectables that clearly dominated the list: Antalgina, Penicillin, and Megacilina. The dominance of antibiotic use is striking throughout the response set.

c. Treatment of diarrheas in children

Ninety-two percent of respondents said they treated infants and children suffering from diarrheas. There was no noteworthy variation by region. Perhaps the most important dimension of promoters' performance in this regard is the knowledge levels they bring to the treatment of this crucial illness, identified by promoters as the most frequent ailment, followed by gripe, brought to them for attention (Var. 237).

d. Referrals

There is wide institutional consensus that appropriate, normative behavior for promoters is the referral of those cases which are beyond their capacity to treat correctly, although there is considerably less consensus about just what those cases might or should be. Seventy-three percent (N=175) of promoter-respondents, or 62% of all 284 promoters surveyed, said that they did, in fact, make referrals (hace la transferencia de pacientes) to higher levels of public health care. The percentages of respondents by region display a fairly wide range (see Table IV-14a). In absolute numbers, the progression is not perfectly smooth but the range is still substantial: promoter-respondents in Arequipa, Callao, and San Martín refer at around 50% of the level of Puno. Some of this might be explained by access issues -- it is easier to refer patients when there is some place at a reasonable distance to refer them to -- but there is greater likelihood that the variation is a function of regional policy and training. The relationship between training and promoter activities will be explored below and may be at least partially explained by the purposes or reasons for which promoters do referrals at all.

TABLE IV-14a

REGIONAL FREQUENCY IN PROMOTER REFERRALS TO HIGHER LEVELS OF PUBLIC HEALTH CARE
(in numbers * and percentages,** in rank order of frequency) (Var. 218; N=241)

Rank	Region	Number	%
1	Puno	33	97.1%
2	Ica	24	88.9%
3	Huánuco	25	86.2%
4	Piura	23	82.1%
5	Ancash	23	79.3%
6	San Martín	17	51.5%
7	Arequipa	13	50.0%
8	Callao	17	48.6%
		175	72.6%

* Numbers of referrals made by promoters surveyed in each region.
** Percentages of promoters surveyed in each region who made referrals.

Table IV-15 arrays the total numbers of referrals made by promoter-respondents during the month prior to the survey, by region and by destination of referral. The total N is smaller than the number of respondents who said they did referrals as a normal part of their work, simply because some promoters had not made any referrals during

TABLE IV-15

PROMOTER REFERRAL PATTERNS,* BY DESTINATION OF REFERRAL, BY REGION
(in numbers and percentages)

Region	To Health Post (Var. 220)		To Health Center (Var. 219)		To Local Hospitals** (Var. 221)		Totals	
Piura-Tumbes	5	22.7	12	54.5	5	22.7	22	12.9
San Martín	5	31.25	7	43.75	4	25.0	16	9.4
Huánuco	7	29.2	7	29.2	10	41.7	24	14.0
Callao	2	15.4	9	69.2	2	15.4	13	7.6
Ica	6	25.0	6	25.0	12	50.0	24	14.0
Arequipa	2	14.3	11	78.6	1	7.1	14	8.2
Puno	23	51.1	16	35.6	6	13.3	45	26.3
Ancash	5	38.5	4	30.8	4	30.8	13	7.6
Totals:	55	32.2	72	42.1	44	25.7	171	100.0

* During the month preceding the survey: all referrals.
** There were another 12 referrals to Regional Hospitals. Through an oversight discovered too late, regional crosstabs for these were not printed out.

that period. In order of frequency, promoters refer most often to Health Centers, followed by Health Posts and Local Hospitals; there is little referral to Regional Hospitals. If these figures reflect average behavior throughout the year, then promoters are somewhat more likely to refer to a Health Center than they are to a Health Post. If all frequencies of referral to levels of care other than Health Posts are combined (i.e., Health Center referrals (N=72), Local Hospital referrals, (N=44), and Regional Hospital referrals (N=12), the total is 128, or 70% of all promoter referrals (N=171+12=183); this would imply that, at least during the month prior to this survey, promoters as a group were over three times as likely to refer patients to some higher level of care than to a Health Post. This pattern runs counter to the structure of the public health pyramid, which would predict that promoters would make more referrals to Health Posts than to other care levels. By region, the groups of promoters most likely to refer to a Health Post were those in Puno, San Martín, and Ancash; those most likely to refer to a Health Center were in Arequipa, Callao, and Piura and those most likely to refer to a Local Hospital were in Ica and Huánuco. The pattern suggests issues of relative urbanization and access as at least partial explanations. This will be examined below in the context of reasons for referral.

Table IV-16 breaks down frequencies of promoter referrals by categories. The overwhelming majority of promoters (84%) make between one and five referrals to any higher level of care during the month prior to the survey. If we divide the total number of promoters who responded to the question about referrals (N=241), the average number of referrals per promoter responding is .71 for the month; the average for those responding positively to the question (N=175) is a little under 1.0; and the average (or productivity measured in terms of referrals from the community to upper levels of care) for the sample as as a whole (N-284) is .6 referrals per month per promoter, surely very low. Only 38% of respondents used referral cards (tarjetas de transferencia) (Var. 236).

Table IV-17 (Vars. 223-235) presents a cross-tabulation by region of the responses to the open-ended question: "Why did you refer those patients (during the month prior to this survey?)". Far and away the most common reason is a combination of lack of personnel and/or medicines (N=60 responses) and the promoter's own incapacity to handle the medical need in question (N=59 responses); the total of 119 responses of this sort reflects both the limitations of health care at the community level and the promoter's ability to recognize those limitations. Ranked in order of frequency of mention, the reasons given in free-elicitation questioning were:

1) Lack of doctor, medicines (60)
2) Beyond promoter's capacity to handle (59)
3) Dehydration in children (23)
4) Wounds (19)
5) Fever (18)

TABLE IV-16

FREQUENCY OF PROMOTER REFERRAL, BY CATEGORY, BY REGION
(in number and percentages) (Vars. 219, 220, 221)

	Referrals During Month Prior to Survey							
	1-5 Referrals		6-10 Referrals		Over 10 Referrals		Totals*	
	No.	%	No.	%	No.	%	No.	%
Region								
Piura-Tumbes	14	63.6	2	9.1	6	27.3	22	100.0
San Martín	13	81.25	3	18.75	0	0.0	16	100.0
Huánuco	22	91.7	1	4.2	1	4.2	24	100.0
Callao	11	84.6	0	0.0	2	15.4	13	100.0
Ica	19	79.2	2	8.3	3	12.5	24	100.0
Arequipa	12	85.7	2	14.3	0	0.0	14	100.0
Puno	42	93.3	1	2.2	2	4.4	45	100.0
Ancash	11	84.6	1	7.7	1	7.7	13	100.0
Total	14[illegible]	84.2	12	7.0	15	8.8	171**	100.0

* Average number of referrals per promoter

** Variance from total figure in Table IV-14 derives from lack of cross-tabulation data on Regional Hospitals (see footnote to Table IV-15) and a few non-responses.

* * * C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY TRANSF (GROUP) TRANSFERENCIAS RAZONES

TABLE IV-17

REASONS FOR PATIENT REFERRALS BY PROMOTERS TO HIGHER LEVELS OF CARE DURING MONTH PRIOR TO SURVEY
RAZONES PARA LA TRANSFERENCIA DE PACIENTES POR LOS PROMOTORES NIVELES MAS ALTOS DE ATENCIO DURANTE EL MES ANTES DE LA ENCUESTA

VAR001	COUNT / COL PCT	vomiting vómitos 1	wounds heridas 2	TB TBC 3	complications from contraceptives (anticons) 4	infections infección 5	dehydration deshidratación 6	stitches puntos 7	family planning planifam. 8	fever fiebre 9	too difficult demasiado difícil 10	lack doctor, medicines falta medico, meds. 11	ROW TOTAL
PIURA-TUMBES	1	3 33.3	2 10.5	1 7.1	0 0.0	1 50.0	9 39.1	0 0.0	2 11.8	7 38.9	3 5.1	10 16.7	21 13.9
SAN MARTIN	2	3 33.3	2 10.5	0 0.0	1 50.0	0 0.0	2 8.7	2 28.6	0 0.0	2 11.1	6 10.2	6 10.0	17 11.3
HUANUCO-PASCO-UCAYAL	3	0 0.0	2 10.5	1 7.1	0 0.0	0 0.0	2 8.7	0 0.0	1 5.9	2 11.1	4 6.8	12 20.0	19 12.6
CALLAO	4	0 0.0	5 26.3	0 0.0	0 0.0	0 0.0	3 13.0	0 0.0	1 5.9	2 11.1	3 5.1	5 8.3	13 8.6
ICA	5	2 22.2	3 15.8	3 21.4	1 50.0	1 50.0	3 13.0	2 28.6	6 35.3	2 11.1	7 11.9	6 10.0	23 15.2
AREQUIPA	6	0 0.0	4 21.1	4 28.6	0 0.0	0 0.0	3 13.0	3 42.9	2 11.8	2 11.1	6 10.2	4 6.7	13 8.6
PUNO	7	1 11.1	0 0.0	4 28.6	0 0.0	0 0.0	0 0.0	0 0.0	4 23.5	0 0.0	12 20.3	9 15.0	23 15.2
ANCASH	8	0 0.0	1 5.3	1 7.1	0 0.0	0 0.0	1 4.3	0 0.0	1 5.9	1 5.6	18 30.5	8 13.3	22 14.6
	COLUMN TOTAL	9 6.0	19 12.6	14 9.3	2 1.3	2 1.3	23 15.2	7 4.6	17 11.3	18 11.9	59 39.1	60 39.7	151 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

151 VALID CASES 133 MISSING CASES

Vars 223 224 225 226 227 228 229 231 232 234 235

that period. In order of frequency, promoters refer most often to Health Centers, followed by Health Posts and Local Hospitals; there is little referral to Regional Hospitals. If these figures reflect average behavior throughout the year, then promoters are somewhat more likely to refer to a Health Center than they are to a Health Post. If all frequencies of referral to levels of care other than Health Posts are combined (i.e., Health Center referrals (N=72), Local Hospital referrals (N=44), and Regional Hospital referrals (N=12), the total is 128, or 70% of all promoter referrals (N=171+12=183); this would imply that, at least during the month prior to this survey, promoters as a group were over three times as likely to refer patients to some higher level of care than to a Health Post. This pattern runs counter to the structure of the public health pyramid, which would predict that promoters would make more referrals to Health Posts than to other care levels. By region, the groups of promoters most likely to refer to a Health Post were those in Puno, San Martin, and Ancash; those most likely to refer to a Health Center were in Arequipa, Callao, and Piura and those most likely to refer to a Local Hospital were in Ica and Huanuco. The pattern suggests issues of relative urbanization and access as at least partial explanations. This will be examined below in the context of reasons for referral.

Table IV-16 breaks down frequencies of promoter referrals by categories. The overwhelming majority of promoters (84%) make between one and five referrals to any higher level of care during the month prior to the survey. If we divide the total number of promoters who responded to the question about referrals (N=241), the average number of referrals per promoter responding is .71 for the month; the average for those responding positively to the question (N=175) is a little under 1.0; and the average (or productivity measured in terms of referrals from the community to upper levels of care) for the sample as

6) Family planning (17)
7) Tuberculosis (14)
8) Vomiting (9)
9) Stitches (7)
Burns (7)
10) Complications related to contraceptives (2)
Eye and ear infections (2)
11) Pap smear (1).

From a medical standpoint, the presence of dehydration in children as the third highest frequency of freely-elicited response is a matter of gravest concern, since this is an area where much more could be done by the promoter, with referrals only for cases which required mechanical means of recuperation (i.e., intravenous feeding).

e. Childbirths (Var. 243)

Ninety-two promoters -- 60% of respondents and 54% of the total sample -- said that they had assisted at childbirths. The distribution was fairly wide, with the largest number of cases in Puno (N=25) and the fewest in Callao (N=4). In order of descending frequency, the numbers of promoter's reporting that they assisted at childbirths, by region, were as follows: Puno (25); Ancash (17); Arequipa (12); Huánuco (10); Piura-Tumbes and San Martín (9 each); Ica (6); and Callao (4). The frequency with which they provided this service, as indicated by the total number of childbirths attended over the past year, is presented in Table IV-17a. The pattern seems to be for promoters who do attend births to do either a fair number or very few; there is relatively low frequency in the middle portion of the range.

TABLE IV-17a

CHILDBIRTHS ATTENDED BY PROMOTERS, BY REGION, DURING YEAR PRIOR TO SURVEY

	Number of Childbirths Attended During Past Year						
Regions	1	2	3	4	5	6 or more	Total
Piura-Tumbes	2	-	-	-	1	6	9
San Martín	-	3	1	1	1	3	9
Huánuco	1	2	4	1	-	2	10
Callao	4	-	-	-	-	-	4
Ica	2	3	1	-	-	-	6
Arequipa	5	-	1	-	-	6	12
Puno	2	3	2	-	4	14	25
Ancash	9	4	-	2	-	2	17
Total	25	15	9	4	6	33	92

Surprisingly, it appears that male promoters attend more births than do female promoters: 64% of promoters who said that they had attended any childbirths over the preceding year were males and, of these, 28% had attended six or more childbirths during that period.

3. Promoter Activity Priorities (Var. 144)

Each promoter was asked to name which activity was, in his or her view, the most important of the activities included in the discussion above. Since there was, with one exception, no significant variation by region, the total responses are presented below in rank order according to frequency of mention, without regional discrimination* (see Table IV-18).

TABLE IV-18

PROMOTER RANKINGS OF MOST IMPORTANT ACTIVITIES, BY FREQUENCY OF SPONTANEOUS RESPONSE

Rank	Activity
1	First aid (72)
2	Family planning (43)
3	Referrals of cases of tuberculosis (21)
4	Vaccinations (18)
5	Health education talks (14)
6	Care of children with diarrheas (13)
7	Solid waste disposal (11)
8	Prenatal care and attendance at childbirths (10)
9	All activities (9)
10	Home gardens (8)
11	Maternal/child health (6)
12	Injections (5)
13	Nutrition, pregnant women (4)
14	Community meetings (2)
	Rabies notification (2)
	Other (infectious diseases and chronic illnesses) (2)
15	Breastfeeding (1)
16	Management of medicines (1)
	Respiratory diseases (1)
	Nutrition in general (1).

Not surprisingly, given the context in which most of them operate and the corresponding needs and expectations of their communities, promoters spontaneously mentioned "first aid" as the most important of their activities. What was surprising was the relatively high frequency of the "family planning" responses; however, 70% of those responses were accounted for by Ica (12), Puno (10), and Callao (8), with almost no response in other regions.

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* The completed two-page table disaggregated by region is in Volume II, pp. 113-14, Promoter Crosstabs.

4. Time Spent on Promoter Activities (Vars. 325-335)

Promoters were asked how many hours per day they spent on their promoter activities and on how many days in the week they performed those activities. The responses to these questions are presented in Tables IV-19 and IV-20. A little less than one-third of promoters spend two hours a day on their promoter activities; 15% spend one hour and 14% spend three hours. Thus almost 60% of promoters say they spend one to three hours a day on their various health-related tasks. For 37% of these respondents, these hours may be spread over every day of the week; for over 50%, a six- or seven-day accessibility is standard. In general, these promoters feel that a promoter's work is never done, since community need does not always respond to office hours. This does not mean that promoters do not keep "office hours" -- a number of them do (see Chapter V) -- only that many of them see their role as one of easy accessibility as an important requirement of promoter role. These figures leave, however, another 34% who perform their activities on three or fewer days of the week.

E. Promoter Knowledge (Vars. 58-79, 147-159, 162-166, 169-172, 174-178, 180-184, 86-195, 198-202, 204-210, 212-216, and 223-235)

1. Vaccinations (Vars. 58-79)

Promoters were asked, in an open-ended question, what vaccinations children should have, at what age, and what dosage (i.e., frequency). Eighty-one percent (N=231) of the total sample could freely mention at least one vaccination children should have (see Table IV-21), a fairly high level of knowledge. In order of descending frequency promoters were able to mention BCG, polio, measles, and DPT; a minuscule number mentioned tetanus toxoid independently, probably because it is customarily subsumed under DPT (triple). There was almost no knowledge about yellow fever or smallpox.

Promoters were also asked what vaccinations should be given to pregnant mothers and, in this case, knowledge levels were poor. Of 234 respondents (82% of the total sample), 47% simply did not know the answer at all and 49% gave the correct answer, i.e., tetanus toxoid (Var. 79).

2. Child Diarrheas (Vars. 146-172)

Given the importance of this subject, a considerable amount of questionnaire space was devoted to this subject and included recognition of signs of dehydration, appropriate treatment, feeding of children with diarrhea, and preventive measures for avoiding diarrheas.

Table IV-22 summarizes knowledge levels about recognition of signs of dehydration. Sixty-eight and 67% of respondents, respectively, spontaneously mentioned wrinkled skin and sunken eyes. Forty-eight and

TABLE IV-19

HOURS PER DAY SPENT BY PROMOTERS ON PROMOTER ACTIVITIES, BY REGION
(in numbers and percentages)

Region	Hours per Day								Raw Total	
	1	2	3	4	5	6	7	8	No.	%
Piura-Tumbes	2	7	5	4	1	1	2	2	24	10.9
San Martín	5	10	2	2	5	-	2	2	28	12.7
Huánuco	6	10	3	2	1	3	2	2	29	13.1
Callao	9	12	3	2	-	2	-	2	30	13.6
Ica	1	6	6	2	1	4	-	7	27	12.2
Arequipa	3	10	1	4	-	2	1	2	23	10.4
Puno	-	5	5	4	-	3	2	13	32	14.5
Ancash	7	7	6	5	-	1	-	2	28	12.7
	33(14.9)	67(30.3)	31(14.0)	25(11.3)	8(3.6)	16(7.2)	7(4.1)	32(14.5)	221	100.0

TABLE IV-20

NUMBER OF DAYS IN THE WEEK ON WHICH PROMOTERS PERFORM THEIR ACTIVITIES, BY REGION
(in numbers and percentages)

Region	Days in Week							Raw Total	
	1	2	3	4	5	6	7	No.	%
Piura-Tumbes	3	1	-	-	3	8	10	25	11.2
San Martín	1	1	2	-	3	2	15	26	11.6
Huánuco	3	2	2	1	2	5	13	28	12.5
Callao	5	2	5	-	-	9	13	34	15.2
Ica	2	2	5	3	2	3	9	27	12.1
Arequipa	1	6	3	1	3	3	7	24	10.7
Puno	15	8	1	1	3	2	2	32	14.3
Ancash	-	4	3	-	4	3	13	28	12.5
Column Total:	30(13.4)	26(11.6)	21(9.4)	6(2.7)	20(8.9)	35(15.6)	82(36.6)	224	100.0

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-21

PROMOTER KNOWLEDGE: VACCINATIONS
CONOCIMIENTOS DE LOS PROMOTORES: INMUNIZACIONES

VAR001 REGION DE SALUD
BY VACUNA (GROUP) VACUNACIONES

VAR001	COUNT / COL PCT	VACUNA: tetanus (Antitetán) 1	measles (Sarampion) 2	DPT (Triple) 3	BCG (BCG) 4	polio (Polio) 5	ROW TOTAL
PIURA-TUMBES	1	2 25.0	22 12.0	22 12.4	27 12.9	22 11.7	28 12.1
SAN MARTIN	2	1 12.5	19 10.4	15 8.5	24 11.4	19 10.1	27 11.7
HUANUCO-PASCO-UCAYALI	3	0 0.0	21 11.5	18 10.2	25 11.9	23 12.2	28 12.1
CALLAO	4	1 12.5	31 16.9	29 16.4	31 14.8	32 17.0	35 15.2
ICA	5	2 25.0	18 9.8	22 12.4	24 11.4	21 11.2	26 11.3
AREQUIPA	6	0 0.0	17 9.3	23 13.0	25 11.9	18 9.6	26 11.3
PUNO	7	1 12.5	30 16.4	27 15.3	27 12.9	29 15.4	32 13.9
ANCASH	8	1 12.5	25 13.7	21 11.9	27 12.9	24 12.8	29 12.6
	COLUMN TOTAL	8 3.5	183 79.2	177 76.6	210 90.9	188 81.4	231 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

231 VALID CASES 53 MISSING CASES

Vars	58	61	64	67	73

* * * CROSSTABULATION * * *

TABLE IV-22

VAR001 REGION DE SALUD
BY SIGNOS (GROUP) SIGNOS - NINO DESHIDRATADO

PROMOTER KNOWLEDGE: SIGNS OF DEHYDRATION
CONOCIMIENTOS DEL PROMOTOR: SIGNOS DESHIDRATACION

VAR001	COUNT / COL PCT	SIGNOS wrinkled skin piel arrug.1	sunken eyes ojos hundid.2	intense thirst sed intens.3	dry mouth boca seca 4	abdominal pain dolor abdom.5	loss of appetite pérdida appet.6	blood in stool sangre en heces7	liquid stool liquid8	vomiting vómitos 9	fever fiebre 10	weight loss pérdida peso 11	ROW TOTAL
PIURA-TUMBES	1	13 8.0	12 7.6	7 8.3	8 8.1	3 8.8	6 9.2	3 11.1	8 9.3	10 12.8	9 10.5	15 13.3	28 11.8
SAN MARTIN	2	16 9.9	13 8.2	6 7.1	7 7.1	10 29.4	7 10.8	0 0.0	6 7.0	9 11.5	15 17.4	11 9.7	30 12.7
HUANUCO-PASCO-JCAYAL	3	16 9.9	21 13.3	14 16.7	16 16.2	1 2.9	5 7.7	2 7.4	15 17.4	12 15.4	14 16.3	14 12.4	27 11.4
CALLAO	4	24 14.8	21 13.3	12 14.3	13 13.1	1 2.9	15 23.1	3 11.1	15 17.4	12 15.4	15 17.4	14 12.4	37 15.6
ICA	5	23 14.2	25 15.8	6 7.1	19 19.2	3 8.8	7 10.8	2 7.4	10 11.6	5 6.4	10 11.6	16 14.2	27 11.4
AREQUIPA	6	21 13.0	11 7.0	15 17.9	4 4.0	8 23.5	1 1.5	15 55.6	19 22.1	13 16.7	10 11.6	4 3.5	26 11.0
PUNO	7	25 15.4	28 17.7	10 11.9	15 15.2	3 8.8	11 15.9	2 7.4	10 11.6	13 16.7	8 9.3	22 19.5	33 13.9
ANCASH	8	24 14.8	27 17.1	14 16.7	17 17.2	5 14.7	13 20.0	0 0.0	3 3.5	4 5.1	5 5.8	17 15.0	29 12.2
	COLUMN TOTAL	162 68.4	158 66.7	84 35.4	99 41.8	34 14.3	65 27.4	27 11.4	86 36.3	78 32.9	86 36.3	113 47.7	237 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED) Vars 147 148 149 150 151 152 153 154 155 156 157

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-22 (concl.)

VAR001 REGION DE SALUD
BY SIGNOS (GROUP) SIGNOS - NIND DESHIDRATADO

PAGE 2 OF 2

VAR001	COUNT / COL PCT	SIGNOS: fallen fontanelle font. hund	SIGNOS: crying w/o tears llora sin lágrimas	ROW TOTAL
PIURA-TUMBES	1	2 / 4.7	1 / 9.1	28 / 11.8
SAN MARTIN	2	1 / 2.3	1 / 9.1	30 / 12.7
HUANUCO-PASCO-UCAYAL	3	8 / 18.6	2 / 18.2	27 / 11.4
CALLAO	4	8 / 18.6	4 / 36.4	37 / 15.6
ICA	5	1 / 2.3	0 / 0.0	27 / 11.4
AREQUIPA	6	0 / 0.0	0 / 0.0	26 / 11.0
PUNO	7	8 / 18.6	1 / 9.1	33 / 13.9
ANCASH	8	15 / 34.9	2 / 18.2	29 / 12.2
	COLUMN TOTAL	43 / 18.1	11 / 4.6	237 / 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

237 VALID CASES 47 MISSING CASES

Vars 158 159

42%, respectively, mentioned weight loss and dry mouth. And about one-third of respondents spontaneously mentioned liquid stool, fever, vomiting, and acute thirst as signs of dehydration. These are low levels of knowledge for such a crucial area and reflect emphasis on acute symptomatology of an advanced condition with little recognition of earlier warning signs. There is no apparently significant variation by region.

Table IV-23 presents promoter knowledge about appropriate treatment for diarrheas in children (Vars. 161-166). Sixty-nine percent of respondents would use homemade rehydration fluids, 55% would use antidiarrheal medications, and 43% would use ORS; very few would resort to use of antibiotics. As for associated dietary counselling for mothers (Table IV-24; Var. 167-172), 62% would advise administration of liquid only, 34% would advise continuance of breastfeeding, and 25% would stop all feeding for 24 hours. These levels of knowledge are not impressive standing alone; in the context of the negative responses which reflect high rates of simply not knowing, they are even more dismaying.

Finally, in terms of prevention of diarrheas in children, again an open-ended elicitation question (Vars. 173-178), 81% prescribed boiling the water to be consumed by infants and children, 67.5% recommended hand-washing before feeding, 57% talked about the need to protect food from contamination, and 48% simply indicated that the house should be kept clean (Table IV-25). These are better knowledge levels than those displayed in the areas of treatment and diet, but still inadequate for health workers, one of whose normative tasks is health education.

3. Management of the Child with Fever (Vars. 179-184)

In a related area of health education, an alarming proportion of respondents (57%) said that antibiotics should be administered to treat fevers in children. Forty-nine percent did volunteer the recommendation of the alcohol rub and 23% said the child's clothing should be removed (Table IV-26).

4. Danger Signs During Pregnancy (Vars. 185-195)

It may be that the institutional ambivalence about the promoter's role in prenatal care is what is reflected in the very low levels of knowledge about warning signals during pregnancy (see Table IV-27). The percentage of promoters (74%) who could provide any response was lower than in other knowledge areas and, with one exception (vaginal bleeding), no more than 49% of respondents could provide spontaneous information in these areas. Rank order of knowledge levels was:

1) Vaginal bleeding (61%)
2) Edema (49%)
3) Vomiting (40%)
4) Headache (29%)
5) Dizziness (28%)

TABLE IV-23

* * * CROSSTABULATION * * *

PROMOTER KNOWLEDGE: APPROPRIATE TREATMENT FOR DIARRHEAS IN CHILDREN

CONOCIMIENTOS DEL PROMOTOR: TRATAMIENTO APROPIADO PARA LAS DIARREAS EN LOS NIÑOS

VAR001 REGION DE SALUD
BY CUHAN (GROUP) CUHAN DIARHEA

VAR001 — COUNT / COL PCT	CUHAN: Sales rehydrating 1	Suero casero 2	anti-diarrheals Jarabe Cab. Alcanfor 3	anti-biotics Antibiotico 4	other Otro 5	ROW TOTAL
1 PIURA-TUMBES	15 14.9	17 10.5	17 13.3	0 0.0	2 5.4	25 10.6
2 SAN MARTIN	9 8.9	17 10.5	18 14.1	5 22.7	2 5.4	33 14.0
3 HUANUCO-PASCO-UCAYAL	5 5.0	23 14.2	14 10.9	2 9.1	6 16.2	29 12.3
4 CALLAO	24 23.8	30 18.5	15 11.7	5 22.7	10 27.0	36 15.3
5 ICA	25 24.8	9 5.6	9 7.0	1 4.5	1 2.7	26 11.1
6 AREQUIPA	9 8.9	18 11.1	14 10.9	4 18.2	1 2.7	26 11.1
7 PUNO	5 5.0	27 16.7	17 13.3	4 18.2	12 32.4	31 13.2
8 ANCASH	9 8.9	21 13.0	24 18.8	1 4.5	3 8.1	29 12.3
COLUMN TOTAL	101 43.0	162 68.9	128 54.5	22 9.4	37 15.7	235 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

235 VALID CASES 49 MISSING CASES

Var 162 163 164 165 166

* * * CROSSTABULATION * * *

VAROD1 REGION DE SALUD
BY ALIMENT (GROUP) ALIMENTACION NINOS CON DIARREAS

TABLE IV-24
PROMOTER KNOWLEDGE: APPROPRIATE FEESING PRACTICES FOR DIARRHEAS IN CHILDREN
CONOCIMIENTOS DEL PROMOTOR: PRACTICAS APROPIADAS DE ALIMENTACION PARA LAS DIARREAS EN LOS NIÑOS

VAROD1	COUNT / COL PCT	ALIMENT cont.breast-feeding (Seg. alimento Lactancia) 1	liquids only (Solo lrg.) 2	no feeding for 24 hrs. (Quite Al. 24 horas) 3	hygiene (Aseo) 4	other (Otro) 5	ROW TOTAL
PIURA-TUMBES	1	9 11.5	15 10.6	7 12.3	4 25.0	5 8.6	27 11.8
SAN MARTIN	2	5 6.4	9 6.4	13 22.8	2 12.5	6 10.3	30 13.2
HUANUCO-PASCO-JCAYAL	3	9 11.5	19 13.5	7 12.3	3 18.8	5 8.6	27 11.8
CALLAO	4	11 14.1	23 16.3	7 12.3	4 25.0	13 22.4	35 15.4
ICA	5	14 17.9	17 12.1	6 10.5	1 6.3	6 10.3	26 11.4
AREQUIPA	6	21 26.9	9 6.4	3 5.3	0 0.0	4 6.9	25 11.0
PUNO	7	6 7.7	25 17.7	5 8.8	2 12.5	11 19.0	30 13.2
ANCASH	8	3 3.8	24 17.0	9 15.8	0 0.0	6 10.3	28 12.3
	COLUMN TOTAL	78 34.2	141 61.8	57 25.0	16 7.0	58 25.4	228 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

228 VALID CASES 55 MISSING CASES

Vars 168 169 170 171 172

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-25

VAR001 REGION DE SALUD
BY EVITAR (GRUPO) ACTIVIDADES PARA EVITAR DIARREAS

PROMOTER KNOWLEDGE: PREVENTION OF DIARRHEAS IN CHILDREN
CONOCIMIENTOS DEL PROMOTOR: PREVENCION DE LAS DIARREAS EN LOS NIÑOS

	EVITAR					
COUNT / COL PCT	boil water (Hervir Ag.) 1	wash hands (Lavar Manos) 2	cover food (Proteger Comida) 3	clean house (Casa limpia) 4	other (Otro) 5	ROW TOTAL
VAR001						
1 PIURA-TUMBES	23 11.9	19 11.3	17 12.6	15 13.3	2 7.7	28 11.8
2 SAN MARTIN	23 11.9	21 13.1	13 9.6	18 15.9	7 26.9	31 13.1
3 HUANUCO-PASCO-UCAYAL	25 13.0	25 15.6	14 10.4	14 12.4	1 3.8	29 12.2
4 CALLAO	29 15.0	26 16.3	20 14.8	13 11.5	5 19.2	36 15.2
5 ICA	22 11.4	19 11.9	18 13.3	11 9.7	3 11.5	27 11.4
6 AREQUIPA	22 11.4	17 10.6	23 17.0	11 9.7	0 0.0	26 11.0
7 PUNO	23 11.9	17 10.6	19 14.1	16 14.2	4 15.4	31 13.1
8 ANCASH	26 13.5	17 10.6	11 8.1	15 13.3	4 15.4	29 12.2
COLUMN TOTAL	193 81.4	160 67.5	135 57.0	113 47.7	26 11.0	237 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

237 VALID CASES 47 MISSING CASES

Vars 174 175 176 177 178

* * * CROSSTABULATION * * *

TABLE IV-26

VAR001 REGION DE SALUD
BY FIEBRE (GROUP) NIÑOS CON FIEBRE TRATAMIENTO

CONOCIMIENTOS DEL PROMOTOR: TRATAMIENTO DE FIEBRES EN LOS NIÑOS
PROMOTER KNOWLEDGE: TREATMENT OF FEVERS IN CHILDREN

VAR001	COUNT / COL PCT	FIEBRE remove clothing Quitar ropa 1	alcohol rub alcohol 2	antibiotics gotas + antibiotic. 3	herbs hierbas 4	baths bañarlo 5	ROW TOTAL
PIURA-TUMBES	1	11 20.8	14 12.2	14 10.5	1 8.3	3 15.0	28 12.0
SAN MARTIN	2	6 11.3	13 11.3	14 10.5	3 25.0	0 0.0	30 12.8
HUANUCO-PASCO-JUNIN	3	0 0.0	13 11.3	23 17.3	2 16.7	0 0.0	29 12.4
CALLAO	4	9 17.0	24 20.9	23 17.3	0 0.0	3 15.0	36 15.4
ICA	5	8 15.1	17 14.8	15 11.3	0 0.0	1 5.0	27 11.5
AREQUIPA	6	2 3.8	15 13.0	6 4.5	1 8.3	4 20.0	25 10.7
PUNO	7	9 17.0	7 6.1	19 14.3	5 41.7	6 30.0	31 13.2
ANCASH	8	8 15.1	12 10.4	19 14.3	0 0.0	3 15.0	28 12.0
	COLUMN TOTAL	53 22.6	115 49.1	133 56.8	12 5.1	20 8.5	234 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

234 VALID CASES 50 MISSING CASES

Vars 180 181 182 183 184

TABLE IV-27

* * * C R O S S T A B U L A T I O N * * * PROMOTER KNOWLEDGE: WARNING SIGNALS DURING PREGNANCY

CONOCIMIENTOS DEL PROMOTOR: SIGNOS DE AVISO DURANTE EL EMBARAZO

VAR001 REGION DE SALUD
BY ALARMA (GROUP) EMBARAZO - SIGNOS DE ALARMA

	COUNT / COL PCT	ALARMA fever Fiebre 1	bloody discharge Sangre-pérdida 2	dizziness Mareos 3	vomiting Vómitos 4	swelling Hinchazones 5	convulsion Ataque 6	headache Dolores cabeza 7	no fetal movement Ausencia Mov. fetales 8	liquid discharge Pérdida líq. partes 9	other Otros 10	ROW TOTAL
VAR001												
PIURA-TUMBES	1	3 6.8	11 8.5	4 6.8	9 10.7	7 6.7	2 8.3	6 9.7	2 4.8	3 5.8	0 0.0	19 9.0
SAN MARTIN	2	4 9.1	8 6.2	4 6.8	12 14.3	13 12.5	1 4.2	8 12.9	6 14.3	2 3.8	1 3.2	25 11.8
HUANUCO-PASCO-JCAYAL	3	9 20.5	18 14.0	7 11.9	14 16.7	14 13.5	1 4.2	8 12.9	5 11.9	3 5.8	7 22.6	28 13.2
CALLAO	4	2 4.5	17 13.2	6 10.2	8 9.5	9 8.7	0 0.0	3 4.8	5 11.9	17 32.7	8 25.8	31 14.6
ICA	5	10 22.7	17 13.2	13 22.0	11 13.1	13 12.5	7 29.2	7 11.3	3 7.1	10 19.2	2 6.5	27 12.7
AREQUIPA	6	5 11.4	14 10.9	6 10.2	10 11.9	12 11.5	4 16.7	7 11.3	7 16.7	6 11.5	1 3.2	23 10.8
PUNO	7	8 18.2	19 14.7	13 22.0	12 14.3	20 19.2	6 25.0	14 22.6	9 21.4	3 5.8	7 22.6	31 14.6
ANCASH	8	3 6.8	25 19.4	6 10.2	3 9.5	16 15.4	3 12.5	9 14.5	5 11.9	8 15.4	5 16.1	28 13.2
	COLUMN TOTAL	44 20.8	129 60.8	59 27.8	84 39.6	104 49.1	24 11.3	62 29.2	42 19.8	52 24.5	31 14.6	212 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

212 VALID CASES 72 MISSING CASES

VARS 186 187 188 189 190 191 192 193 194 195

6) Vaginal discharge (aqueous) (24.5%)
7) Fever (21%)
8) Absence of fetal movement (20%)
9) Miscellaneous other (15%)
10) Convulsions (11%).

5. Childbirth-Related Behavior (Vars. 198-210)

Since promoters are surprisingly active in attending childbirths (see Section IV.2.e. above), one would hope for reasonably high levels of knowledge about appropriate behavior at such events (Vars. 198-202, 204-210). This is not the case. (see Table IV-27a). A high percentage (81.5%) of respondents knew they should wash their hands before starting to help with a delivery (although the percentage of respondents, 72%, was low), and 63% of these respondents said that the scissors for cutting the umbilical cord should be boiled. However, only 33% said the vaginal area should also be washed. Since many of the promoters who attend births are males and the cultural prescriptions about modesty are strong, the fact that this hygienic behavior is not at the forefront of promoters' minds should come as little surprise. Still, given the high rates of vaginal infections in poor female populations and their potentially deleterious effects on progeny (J. Walsh; personal communication), the issue is far from trivial.

Of similar concern is the low level of knowledge about newborn referrals (see Table IV-28); in fact, it is more accurate to refer to the high levels of ignorance on this score. Again, only 72% of the sample could provide any response and there seemed to be no underlying structure or logic defining the conditions under which newborns should be referred. In descending order of frequency, conditions cited were:

1) Malformations (54%)
2) Low birthweight (36%)
3) Difficulty in breathing (34%)
4) Prematurity (33%)
5) Vaccination (28%)
6) Neonate does not cry (24.5%)
7) Signs of jaundice (18%).

6. Tuberculosis (Vars. 211-217)

Promoters did substantially better on knowledge about tuberculosis (see Table IV-29), particularly in the area of symptoms. Eighty-eight percent of respondents (N=233, or 82% of the total sample surveyed) cited "productive cough" as a cardinal symptom, and 63% added "weight loss" to their diagnostic package. There was a sharp drop in levels of knowledge about other associated symptoms, i.e., anorexia (39%) and night sweats (sudoración nocturna)(38%). However, 57% of respondents said they had no cases of tuberculosis in their communities; 36% presently had one or two TB patients (18%) or from three to ten (18%).

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-27a

PROMOTER KNOWLEDGE: APPROPRIATE MIDWIFERY PRACTICES IMMEDIATELY PRIOR TO CHILDBIRTH

CONOCIMIENTOS DEL PROMOTOR: PRACTICAS APROPIADAS DE OBSTETRICIA, INMEDIATAMENTE ANTES DEL NACIMIENTO

VAR001 REGION DE SALUD
BY ANTES (GROUP) ANTES DEL PARTO - ACTIVIDADES

VAR001	COUNT / COL PCT	ANTES wash hands (Lever manos) 1	boil scissors (Hervir tijeras) 2	palpate abdomen (Palpar vientre) 3	wash vaginal area (Lavar partes) 4	other (Otro) 5	ROW TOTAL
PIURA-TUMBES	1	12 7.2	6 4.6	7 12.1	6 9.0	6 10.0	17 8.3
SAN MARTIN	2	19 11.4	18 13.8	10 17.2	3 4.5	4 6.7	25 12.2
HUANUCO-PASCO-UCAYAL	3	26 15.6	23 17.7	2 3.4	14 20.9	9 15.0	29 14.1
CALLAO	4	34 20.4	16 12.3	8 13.8	9 13.4	11 18.3	35 17.1
ICA	5	21 12.6	22 16.9	0 0.0	11 16.4	9 15.0	25 12.2
AREQUIPA	6	19 11.4	15 11.5	13 22.4	9 13.4	3 5.0	24 11.7
PUNO	7	19 11.4	13 10.0	15 25.9	8 11.9	9 15.0	26 12.7
ANCASH	8	17 10.2	17 13.1	3 5.2	7 10.4	9 15.0	24 11.7
	COLUMN TOTAL	167 81.5	130 63.4	58 28.3	67 32.7	60 29.3	205 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

205 VALID CASES 72 MISSING CASES

Vars 198 199 200 201 202

TABLE IV-28

PROMOTER KNOWLEDGE: REASONS FOR REFERRAL OF NEONATES
CONOCIMIENTOS DEL PROMOTOR: RAZONES PARA LA TRANSFERENCIA DE LOS RECIEN NACIDOS

* * * C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY RECIEN (GROUP) RECIEN NACIDO - TRANSFERENCIA

VAR001	COUNT / COL PCT	RECIEN does not cry (No llora) 1	RECIEN born before mo. 8 (No cabe Quag) 2	RECIEN skin yellow (Piel Amar.) 3	RECIEN malformed (Malformac.) 4	RECIEN difficulty breathing (Difficult. respirar) 5	RECIEN low birthwt. (Bajo peso) 6	RECIEN vaccinations (vacuna) 7	ROW TOTAL
PIURA-TUMBES	1	5 10.0	8 11.9	5 13.5	4 3.6	5 7.1	6 8.2	9 15.8	23 11.3
SAN MARTIN	2	3 6.0	4 6.0	0 0.0	16 14.4	11 15.7	7 9.6	5 8.8	25 12.3
HUANUCO-PASCO-UCAYAL	3	7 14.0	7 10.4	6 16.2	18 16.2	7 10.0	12 16.4	7 12.3	27 13.2
CALLAO	4	10 20.0	8 11.9	6 16.2	11 9.9	9 12.9	11 15.1	8 14.0	26 12.7
ICA	5	4 6.0	12 17.9	2 5.4	17 15.3	12 17.1	5 6.8	5 8.8	25 12.3
AREQUIPA	6	10 20.0	11 16.4	12 32.4	13 11.7	13 18.6	13 17.8	1 1.8	25 12.3
PUNO	7	5 10.0	9 13.4	2 5.4	11 9.9	6 8.6	9 12.3	16 28.1	29 14.2
ANCASH	8	6 12.0	8 11.9	4 10.8	21 18.9	7 10.0	10 13.7	6 10.5	24 11.8
	COLUMN TOTAL	50 24.5	67 32.8	37 18.1	111 54.4	70 34.3	73 35.8	57 27.9	204 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

204 VALID CASES NO MISSING CASES

Vars 204 205 206 207 208 209 210

TABLE IV-29

PROMOTER KNOWLEDGE: REASONS FOR REFERRAL OF TUBERCULOSIS CASES
CONOCIMIENTOS DEL PROMOTOR: RAZONES PARA LA TRANSFERENCIA DE LOS CASOS DE TUBERCULOSIS

* * * C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY TBC (GROUP) SIGNOS DE TBC

VAR001	COUNT / COL PCT	TBC night sweats (Sudor noct.) 1	loss of appetite (falta apetito) 2	productive cough (Tos productiva) 3	weight loss (Perdida peso) 4	other (otro) 5	ROW TOTAL
PIURA-TUMBES	1	7 8.0	10 11.0	24 11.7	17 11.6	10 13.2	28 12.0
SAN MARTIN	2	12 13.6	9 9.9	25 12.1	13 8.8	2 2.6	31 13.3
HUANUCO-PASCO-UCAYAL	3	12 13.6	17 18.7	27 13.1	26 17.7	9 11.8	28 12.0
CALLAO	4	4 4.5	13 14.3	31 15.0	23 15.6	15 19.7	33 14.2
ICA	5	5 5.6	5 5.5	24 11.7	17 11.6	11 14.5	26 11.2
AREQUIPA	6	12 13.6	9 9.9	25 12.1	17 11.6	0 0.0	26 11.2
PUNO	7	20 22.7	15 16.5	29 14.1	21 14.3	16 21.1	32 13.7
ANCASH	8	15 17.0	13 14.3	21 10.2	13 8.8	13 17.1	29 12.4
	COLUMN TOTAL	88 37.8	91 39.1	206 88.4	147 63.1	76 32.6	233 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

233 VALID CASES 51 MISSING CASES

Vars 212 213 214 215 216

F. Promoter Training (Vars. 83, 87, 91, 95, 99, 103, 107, 111, 115, 119, 123, 127, 131, 135, 139, 143, 145)

Since the subject of promoter training is dealt with in depth in Chapter III, the point of this section is only to reflect promoters' perceptions of where they feel their preparatory training has been either adequate or inadequate in relation to the set of primary activities discussed above. The questions asked were: 1) whether or not promoters had, in fact, received training related to those primary activities and 2) the subject matters (temas) promoters "thought should be expanded upon in promoter training so that they could better serve their communities."

Table IV-30 presents a cross-tabulation by region which responds to the question: "Were you trained to do activity X?". Ranked in descending order of reported frequency, training of promoters in key activities reflected the following pattern:

1) First aid (95%)
2) Diarrheas in children (93%)
3) Infections (905)
4) Educational talks (charlas) (895)
5) Collaboration in vaccination campaigns (84%)
6) Tuberculosis referrals (83.5%)
7) Solid waste disposal (81%)
8) Rabies reporting (79%)
   Lactation and weaning education (79%)
   Nutrition for pregnant women (79%)
9) Family planning guidance (77.5%)
10) Pre-natal care (73%)
    Community meetings (73%)
11) Civil registry of newborns (56%)
12) Thick smears for malaria (51%)
13) Home gardens (40%).

Promoter responses about where they feel they need more training do not present any startling disjuncture with their reports on training already received. Nor do the responses fly in the face of what we have learned about their weakest areas of knowledge, particularly in MCH and management of medicines. We will analyze some of these correspondences in Chapter VII.

G. The Equipping and Supply of the Promoter

1. The Botiquín Comunal or "community medicine chest (Vars. 267-271), associated with a number of regional public- and private-sector promoter programs in Peru, has been predicated on the concept of some sort of basic medical supply to support promoter curative activities. Conceptually the botiquin comunal is distinct from the basic stock of medicines that promoters are supposed to receive upon completion of training. The promoters refer to this stock as their botiquin, but it is not a community pharmacy. In some cases, however, promoters do manage botiquines comunales as part of their regular activities. Under most circumstances, proceeds from sales, with some slight markup, would allow for re-stocking. Re-stocking was to occur through MOH facilities.

TABLE IV-30

* * * C R O S S T A B U L A T I O N * * * PROMOTER TRAINING FOR PRINCIPAL ACTIVITIES
CAPACITACION DE LOS PROMOTORES PARA ACTIVIDADES PRINCIPALES

VAR001 REGION DE SALUD
BY CAPACI (GROUP) CAPACITACION NRO. 1

VAR001	COUNT / COL PCT	CAPACI community gardens Huertas 1	meetings Reuniones 2	solid waste Ex. y Basura 3	1st aid P. Aux 4	prenatal control Embaraz. 5	birth registry Niños Reg. Civil 6	injections Inyectables 7	child diarrheas Niños Diarreas 8	ROW TOTAL
PIURA-TUMBES	1	9 9.4	16 9.1	16 8.2	25 11.0	14 8.0	9 6.7	28 12.9	23 10.3	28 11.7
SAN MARTIN	2	27 28.1	31 17.7	30 15.5	31 13.7	26 14.8	23 17.2	34 15.7	32 14.3	34 14.2
HUANUCO-PASCO-JCAYAL	3	18 18.8	23 13.1	21 10.8	28 12.3	22 12.5	9 6.7	25 11.5	26 11.7	29 12.1
CALLAO	4	3 3.1	20 11.4	23 11.9	32 14.1	23 13.1	6 4.5	26 12.0	33 14.8	36 15.0
ICA	5	1 1.0	24 13.7	26 13.4	27 11.9	26 14.8	25 18.7	21 9.7	27 12.1	27 11.3
AREQUIPA	6	11 11.5	15 8.6	21 10.8	25 11.0	16 9.1	16 11.9	23 10.6	24 10.8	25 10.4
PUNO	7	13 13.5	19 10.9	28 14.4	30 13.2	25 14.2	23 17.2	31 14.3	30 13.5	32 13.3
ANCASH	8	14 14.6	25 14.2	29 14.9	29 12.8	24 13.6	23 17.2	29 13.4	28 12.6	29 12.1
	COLUMN TOTAL	96 40.0	175 72.9	194 80.8	227 94.6	176 73.3	134 55.8	217 90.4	223 92.9	240 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

240 VALID CASES 44 MISSING CASES

Vars 83 87 91 95 99 103 107 111

TABLE IV-30 (concl.)

*** CROSSTABULATION *** PROMOTER TRAINING FOR PRINCIPAL ACTIVITIES
CAPACITACION DE LOS PROMOTORES PARA ACTIVIDADES PRINCIPALES

VAR001 REGION DE SALUD
BY CAPAC2 (GROUP) CAPACITACION NRO. 2

VAR001	COUNT / COL PCT	CAPAC2 health talks Charlas 1	nutrition, pregnancy Gestantes Nutricion 2	TBC referrals Refiere TBC 3	collab. vacc.camps. Colaborac. Vacunas 4	thick smear Gota Gruesa 5	rabies Rabia 6	child feeding Lactancia comidas 7	family planning Planific Fam. 8	ROW TOTAL
PIURA-TUMBES	1	19	17	19	22	21	15	15	16	26
		9.1	9.1	9.6	11.1	17.4	8.0	8.0	8.7	11.0
SAN MARTIN	2	32	31	31	28	31	31	32	29	34
		15.3	16.5	15.7	14.1	25.6	16.6	17.1	15.8	14.4
HUANUCO-PASCO-UCAYAL	3	23	21	24	23	15	21	20	21	27
		11.0	11.2	12.2	11.6	14.9	11.2	10.7	11.5	11.4
CALLAO	4	29	19	24	27	15	24	20	21	37
		13.9	10.2	12.2	13.6	12.4	12.8	10.7	11.5	15.7
ICA	5	27	27	24	23	9	24	27	27	27
		12.9	14.4	12.2	11.6	7.4	12.8	14.4	14.8	11.4
AREQUIPA	6	20	17	20	20	4	20	19	18	24
		9.6	9.1	10.2	10.1	3.3	10.7	10.2	9.8	10.2
PUNO	7	30	28	32	27	2	25	27	25	32
		14.4	15.0	16.2	13.6	1.7	13.4	14.4	13.7	13.6
ANCASH	8	29	27	23	23	21	27	27	26	29
		13.9	14.4	11.7	11.6	17.4	14.4	14.4	14.2	12.3
	COLUMN TOTAL	209	187	197	199	121	187	187	183	236
		88.6	79.2	83.5	84.3	51.3	79.2	79.2	77.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

236 VALID CASES 48 MISSING CASES

Vars 115 119 123 127 131 135 139 143

Promoters were asked if, first of all, they knew what a botiquín comunal was, since there seemed to be some confusion on the subject that emerged during the pre-test period. Promoters' spontaneous definitions indicated a fair understanding of the concept: 38% said that it was medications for the community, 23% said it was to permit the promoter to provide first aid to their communities, and 13% said it was a place to keep their medicines and medical supplies, a total of 74% of the sample with a pretty good idea of what they were talking about; none of the miscellaneous responses were peculiar or contradictory.

However, the actual presence of a botiquín in the promoters' own communities was something else again. Only 34% of respondents said there actually was a botiquín in their community, a total of 83 in all; out of the 284 communities in which promoter surveys were completed, only 19 promoters indicated that there had been a botiquin in their community at some earlier time, probably because it is a relatively new concept. These had largely been discontinued due to lack of interest, lack of money, and/or lack of medicines. However, the numbers are small.

Of the 83 botiquines in existence, 71% were the responsibility of the promoter and 16% the responsibility of some community organization or comite de salud.

The sources of supply (Vars. 297-324) for promoters' stocks of medicines and medical materials are much the same, and the patterns display heavy emphasis on the private-sector pharmacy, followed by the Health Center, and trained by the Regional Hospital and the Health Post (Tables IV-31 and IV-32).

There is some variation by region, but only in Callao and Ica does any public health facility (the Health Center in the case of the former, and the Health Center and Health Post in the case of the latter) surpass in reported frequency of use the pharmacy as the promoter's principal pharmaceutical supplier. The pattern of materials supply (e.g., bandage materials) is slightly different: in San Martin, Ica, and Puno, there seems to be more supplying done by public health facilities.

Coupled with the qualitative data gathered in the various case studies and institutional interviews, this de facto supply system has evolved as an adaptive strategy to counter the absence of a consistently present, consistently functional pharmaceutical supply system. As nurse supervisors, sanitarios, and some promoters themselves pointed out, the de facto system is costly to patients, limits the profit margins for at least conscientious promoters, and eludes the capacity of the public health system to supervise and control what medicines promoters buy and administer. It also, by the way, denies the Ministry of Health the savings and profits which could accrue to it as an institution, were a pharmaceutical logistics system functioning efficiently.

The amounts expended by promoters on medicines and supplies are not trivial, given their economic status. Average regional monthly expenditures by pharmacy, Health Center, and Health Post are presented in Table IV-33.* The generally large (sometimes huge) standard deviations, as well as the relatively small number of cases with data good enough to enter (N=88, or 31% of promoters surveyed), inhibits generalization.

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* Data for pharmacies were broken down by Hospital Area as well as by region. Data for Health Centers and Health Posts were broken down only by region.

TABLE IV-31

SOURCES OF PHARMACEUTICALS FOR PROMOTERS
RECURSOS FARMACEUTICOS PARA LOS PROMOTERS

* * * CROSSTABULATION * * *

VAR001 REGION DE SALUD
BY MEDICA (GROUP) ABASTECIMENTO DE MEDICAMENTOS

VAR001	MEDICA health post Puesto Salud 1	health center Centro Salud 2	regional hospital Hospital Regional 3	warehouse Bodega 4	community supply Botiquin Comunal 5	pharmacy Farmacia 6	ROW TOTAL
1 PIURA-TUMBES	3 8.3	7 13.5	0 0.0	0 0.0	1 50.0	7 8.1	16 9.1
2 SAN MARTIN	7 19.4	3 5.8	3 11.5	1 50.0	0 0.0	8 9.3	21 12.0
3 HUANUCO-PASCO-UCAYAL	2 5.6	3 5.8	3 11.5	0 0.0	0 0.0	18 20.9	26 14.9
4 CALLAO	4 11.1	10 19.2	2 7.7	0 0.0	1 50.0	8 9.3	24 13.7
5 ICA	9 25.0	10 19.2	4 15.4	0 0.0	0 0.0	8 9.3	20 11.4
6 AREQUIPA	0 0.0	7 13.5	1 3.8	0 0.0	0 0.0	7 8.1	14 8.0
7 PUNO	9 25.0	8 15.4	6 23.1	1 50.0	0 0.0	15 17.4	29 16.6
8 ANCASH	2 5.6	4 7.7	7 26.9	0 0.0	0 0.0	15 17.4	25 14.3
COLUMN TOTAL	36 20.6	52 29.7	26 14.9	2 1.1	2 1.1	86 49.1	175 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

175 VALID CASES 102 MISSING CASES

Vars 298 302 306 310 314 318

TABLE IV-32

* * * CROSSTABULATION * * *

SOURCES OF MEDICAL SUPPLIES FOR PROMOTERS
RECURSOS DE SUMINISTROS MEDICOS PARA LOS PROMOTORES

VAR001 REGION DE SALUD
BY MATERIAL (GROUP) ABASTECIMIENTO DE MATERIALES

	COUNT / COL PCT	MATERIAL health post (Puesto de Salud)	health center (Centro Salud)	regional hospital (Hospital Regional)	warehouse (Bodega)	community supply (Botiquin Comunal)	pharmacy (Farmacia)	ROW TOTAL
VAR001	1	2	6	0	3	2	7	17
PIURA-TUMBES		8.3	14.6	0.0	33.3	66.7	14.6	12.8
	2	4	4	3	1	0	1	13
SAN MARTIN		16.7	9.8	12.0	11.1	0.0	2.1	9.8
	3	3	2	4	0	0	10	19
HUANUCO-PASCO-UCAYAL		12.5	4.9	16.0	0.0	0.0	20.8	14.3
	4	3	6	1	0	1	10	20
CALLAO		12.5	14.6	4.0	0.0	33.3	20.8	15.0
	5	10	7	6	0	0	8	22
ICA		41.7	17.1	24.0	0.0	0.0	16.7	16.5
	6	0	6	1	0	0	6	13
AREQUIPA		0.0	14.6	4.0	0.0	0.0	12.5	9.8
	7	2	9	6	4	0	4	21
PUNO		8.3	22.0	24.0	44.4	0.0	8.3	15.8
	8	0	1	4	1	0	2	8
ANCASH		0.0	2.4	16.0	11.1	0.0	4.2	6.0
	COLUMN TOTAL	24	41	25	9	3	49	133
		18.0	30.8	18.8	6.8	2.3	36.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

133 VALID CASES 151 MISSING CASES

Vars 297 301 305 309 313 317

TABLE IV-33

AVERAGE MONTHLY EXPENSES ON MEDICINES AND SUPPLIES, BY REGION
(means, standard deviations, number of cases)

	Pharmacy			Health Center			Health Post		
	Mean*	S.D.	No.	Mean	S.D.	No.	Mean	S.D.	No.
Region									
For Entire Population	16,555	1,646	88	18,159	1,920	25	13,433	1,813	27
Piura-Tumbes	29,222	2,075	9	30,000	.000	1	27,000	37,243	3
Piura	16,500	919	2	-	-	-	-	-	-
Sullana	32,857	2,215	7	-	-	-	-	-	-
San Martín	16,577	2,221	10	4,200	502	3	18,198	1,983	4
Moyabamba	20,495	1,320	4	-	-	-	-	-	-
Tarapoto-Lamas	13,965	2,763	6	-	-	-	-	-	-
Huanuco	28,533	2,090	15	30,000	.000	1	8,333	577	3
Pucallpa	22,000	2,042	3	-	-	-	-	-	-
Tingo María	30,167	2,158	12	-	-	-	-	-	-
Callao	13,222	1,463	9	10,067	490	3	13,167	11,776	6
Chancay	15,429	1,590	7	-	-	-	-	-	-
Collique	5,500	636	2	-	-	-	-	-	-
Ica	5,344	344	10	27,500	3,182	2	n.d.	n.d.	n.d.
Ica-Palpa-Nazca	4,610	482	4	-	-	-	-	-	-
Pisco-Castrovirreyna	5,833	258	6	-	-	-	-	-	-
Arequipa	17,360	875	5	42,250	2,583	4	n.d.	n.d.	n.d.
Arequipa	17,950	999	4	-	-	-	-	-	-
Castilla	15,000	.000	1	-	-	-	-	-	-
Puno	10,380	614	15	16,174	1,442	7	4,756	414	9
Melgar-Carabaya	13,200	536	5	-	-	-	-	-	-
Puno-Chucuito	8,970	626	10	-	-	-	-	-	-
Ancash	12,313	896	15	3,488	384	4	31,050	4,094	2
Huáraz	12,313	896	15	-	-	-	-	-	-

* In soles of February-March 1984 (about s/2500-2600 = US$1.00).

However, it seems fair to say that a) the population of promoters as a whole does not seem to spend dramatically different monthly average amounts, whether in private pharmacies, Health Centers, or Health Posts; b) nevertheless, the standard deviations among and within regions are large (e.g., average monthly pharmaceutical expenditures by promoter by region range from a low of s/5,344 in Ica to a high of s/29,222 in Piura, perhaps reflecting the strong preventive emphasis in the Ica model); yet 3) the use of a working figure of s/15,000 per promoter per month on pharmaceutical expenditures at either a public- or private-sector facility appears to be a reasonable working average.

The promoter questionnaire also included an inventory of promoters' current stocks of equipment (Table IV-34), first aid supplies (material de curaciones; Table IV-35), and medicines (Table IV-36). When re-categorized by deciles, the equipping of promoters as a group* looks like this:

100-91 percent have:	none of the 19 items on a more or less standard list of promoter equipment (Vars. 371-389)
90-81 percent have:	an equipment bag/maletin (85%) an oral thermometer (85%)
80-71 percent have:	scissors (79%) a rectal thermometer (75%) Kocher forceps (74%) needles for suturing 22 x 1-1/2 (73%) a 5cc. syringe (72%)
70-61 percent have:	a 10cc. syringe (69%) a covered bucket (66%) dissecting tweezers (62%)
60-51 percent have:	a flashlight (58%).) a tape measure (58%) a hand scrub brush (53.5%) a container for gauze (53%) needles for suturing 20 x 1 1/2 (53%)

** Promoter-respondents (N=211)

TABLE IV-34

* * * C R O S S T A B U L A T I O N * * *

INVENTORY OF PROMOTERS' CURRENT STOCKS OF EQUIPMENT
INVENTARIO DE LAS EXISTENCIAS ACTUALES DE EQUIPO DE LOS PROMOTORES

VAROOI REGION OF SALUD
BY EQUIPI (GROUP) EQUIPO NRO. 1

	EQUIPI	primus stove	thermometer oral	thermometer rectal	aluminum pot	syringes 5 cc.	syringes 10 cc.	suturing needles 22	suturing needles 20	scissors	Kocher forceps	
COUNT / COL PCT		Primus	Therm. Oral	Therm. rect.	Olla aluminio.	Jeringa 5cc	Jeringa 10cc	Agujas 22	Agujas 20	Tijeras	Pinza Kocher	ROW TOTAL
VAROOI		1	2	3	4	5	6	7	8	9	10	
PIURA-TUMBES	1	11 10.9	24 13.4	19 12.0	7 13.7	15 9.9	21 14.4	17 11.0	15 13.5	18 10.8	17 11.0	27 12.8
SAN MARTIN	2	28 27.7	34 19.0	32 20.3	19 37.3	31 20.5	27 18.5	34 22.1	18 16.2	32 19.3	30 19.4	35 16.6
HUANUCO-PASCO-JCAYAL	3	7 6.9	15 8.4	13 8.2	11 21.6	19 12.6	18 12.3	15 9.7	11 9.9	16 9.6	14 9.0	25 11.8
CALLAO	4	15 14.9	23 12.8	23 14.5	10 19.6	18 11.9	10 6.8	13 8.4	12 10.8	22 13.3	19 12.3	26 12.3
ICA	5	3 3.0	11 6.1	7 4.4	2 3.9	8 5.3	12 8.2	9 5.8	6 5.4	6 3.6	2 1.3	16 7.6
AREQUIPA	6	2 2.0	21 11.7	11 7.0	0 0.0	13 8.6	11 7.5	10 6.5	8 7.2	13 7.8	17 11.0	22 10.4
PUNO	7	16 15.8	25 14.0	28 17.7	1 2.0	25 16.6	21 14.4	30 19.5	16 14.4	31 18.7	29 18.7	32 15.2
ANCASH	8	17 16.8	24 13.4	25 15.8	1 2.0	22 14.6	26 17.8	26 16.9	25 22.5	28 16.9	27 17.4	28 13.3
	COLUMN TOTAL	101 47.9	179 84.8	158 74.9	51 24.2	151 71.6	146 69.2	154 73.0	111 52.6	166 78.7	155 73.5	211 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

211 VALID CASES 73 MISSING CASES

Vars 371 372 373 374 375 376 377 378 379 380

TABLE IV-34 (concluded)

* * - C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY EQUIP2 (GROUP) EQUIPO NRO. 2

	COUNT / COL PCT	EQUIP2 dissecting tweezers Pinza disección	Kelly forceps Pinza Kelly	gauze-holder Tembor gaza	covered pail Cubeta con tapa	flashlight Linterna Manos	batteries Pilas	hand-brush Cepillo Manos	tape-measure Cinta Metrica	satchel Maletin	bicycle Bicicleta	ROW TOTAL
VAR001		1	2	3	4	5	6	7	8	9	10	
PIURA-TUMBES	1	15	10	10	18	13	7	12	13	17	1	25
		11.3	13.2	8.8	12.8	10.5	14.9	10.5	10.5	9.3	5.0	11.7
SAN MARTIN	2	27	18	13	24	15	14	23	24	25	0	32
		20.3	23.7	11.5	17.0	12.1	29.8	20.2	19.4	13.7	0.0	15.0
HUANUCO-PASCO-UCAYAL	3	12	5	8	7	9	7	7	9	19	0	25
		9.0	6.6	7.1	5.0	7.3	14.9	6.1	7.3	10.4	0.0	11.7
CALLAO	4	13	6	22	21	17	5	20	18	22	7	25
		18.3	8.8	19.5	14.9	13.7	10.6	17.5	14.5	12.1	35.0	11.7
ICA	5	4	4	3	4	12	3	1	4	26	0	26
		3.0	5.5	2.7	2.8	9.7	6.4	0.9	3.2	14.3	0.0	12.2
AREQUIPA	6	11	2	20	10	12	4	18	19	19	0	22
		8.3	2.9	17.7	7.1	9.7	8.5	15.8	15.3	10.4	0.0	10.3
PUNO	7	18	5	14	30	24	3	14	18	27	6	30
		13.5	8.8	12.4	21.3	19.4	6.4	12.3	14.5	14.8	30.0	14.1
ANCASH	8	27	21	23	27	22	4	19	19	27	6	28
		20.3	29.7	20.4	19.1	17.7	8.5	16.7	15.3	14.8	30.0	13.1
	COLUMN TOTAL	133	71	113	141	124	47	114	124	182	20	213
		62.4	33.3	53.1	66.2	58.2	22.1	53.5	58.2	85.4	9.4	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

213 VALID CASES 71 MISSING CASES

Vars	381	382	383	384	385	386	387	388	389	390	

TABLE IV-35

* * * CROSSTABULATION * * *

INVENTORY OF PROMOTERS' CURRENT STOCKS OF FIRST AID SUPPLIES
INVENTARIO DE LAS EXISTENCIAS ACTUALES DE SUMINISTROS DE PRIMEROS AUXILIOS DE LOS PROMOTORES

VAR001 REGION DE SALUD
BY CURA (GROUP) MATERIAL DE CURACIONES

	COUNT / COL PCT	CURA iodized alcohol Alcohol Yodado 1	benzine Bencina 2	sulfa powder Sulfa en polvo 3	butezine picrate Picrato de Butezina 4	cotton Algodon 5	gauze Gasa 6	adhesive Esparadrapo 7	germicidal soap Jabon germicida 8	other Otros 9	ROW TOTAL
VAR001											
PIURA-TUMBES	1	13 11.9	4 9.1	2 [illegible]	0 0.0	18 11.2	14 9.9	16 12.7	10 12.0	10 14.1	23 12.0
SAN MARTIN	2	19 17.3	2 4.5	5 7.2	3 10.0	27 16.8	23 16.2	19 15.1	14 16.9	11 15.5	29 15.1
HUANUCO-PASCO-JUNIN	3	18 16.4	1 2.3	17 24.6	3 10.0	23 14.3	21 14.8	19 15.1	14 16.9	13 18.3	25 13.0
CALLAO	4	6 5.5	8 18.2	3 4.3	8 26.7	5 3.1	10 7.0	11 8.7	11 13.3	9 12.7	19 9.9
ICA	5	12 10.9	6 13.6	14 20.3	2 6.7	22 13.7	19 13.4	16 12.7	4 4.8	4 5.6	23 12.0
AREQUIPA	6	15 13.6	1 2.3	10 14.5	2 6.7	17 10.6	15 10.6	16 12.7	6 7.2	1 1.4	19 9.9
PUNO	7	15 13.6	4 9.1	3 4.3	2 6.7	23 14.3	19 13.4	14 11.1	5 6.0	16 22.5	25 13.0
ANCASH	8	12 10.9	13 29.5	15 21.7	10 33.3	26 16.1	21 14.8	15 11.9	19 22.9	7 9.9	29 15.1
	COLUMN TOTAL	110 57.3	44 22.9	69 35.9	30 15.6	161 83.9	142 74.0	126 65.6	83 43.2	71 37.0	192 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

192 VALID CASES 92 MISSING CASES

Vars	392	393	394	395	396	397	398	399	400

TABLE IV-36

* * * CROSSTABULATION * * *

INVENTORY OF PROMOTERS' CURRENT STOCKS OF PHARMACEUTICALS
INVENTARIO DE LAS EXISTENCIAS ACTUALES DE FARMACEUTICOS DE LOS PROMOTORES

VAR001 REGION DE SALUD
BY MEDICINI (GROUP) MEDICINA NRO. 1

	COUNT / COL PCT	atropine sulfate (Atropina Sulfato) 1	dimenhydrate (Dimenhidrinato) 2	homatropine (Homatropina) 3	hyocine (Hiocina) 4	dipirone (injectable) (Dipirona) 5	sulfametoxipyradizine (Sulfametoxipiridazina) 6	hepquinoide (Hepquinoide) 7	aspirin (Aspirina) 8	dipirone (tabs.) (Dipirona) 9	maalox (Maalox) 10	ROW TOTAL
VAR001												
PIURA-TUMBES	1	3 1.5	1 7.7	5 10.6	4 10.5	6 10.5	2 12.5	6 23.1	8 7.8	3 7.5	0 0.0	13 9.4
SAN MARTIN	2	7 23.2	2 15.4	10 21.3	7 18.4	12 21.1	4 25.0	5 19.2	6 5.9	6 15.0	4 44.4	14 10.1
HUANUCO-PASCO-UCAYAL	3	4 16.7	2 15.4	1 2.1	4 10.5	5 8.8	0 0.0	0 0.0	11 10.8	1 2.5	0 0.0	15 10.8
CALLAO	4	2 8.3	4 30.8	5 10.6	5 13.2	3 5.3	5 31.3	7 26.9	4 3.9	4 10.0	2 22.2	12 8.6
ICA	5	1 4.2	0 0.0	5 10.6	5 13.2	2 3.5	1 6.3	4 15.4	23 22.5	3 7.5	0 0.0	25 18.0
AREQUIPA	6	6 25.0	2 15.4	5 10.6	3 7.9	7 12.3	1 6.3	2 7.7	10 9.8	5 12.5	0 0.0	11 7.9
PUNO	7	1 4.2	2 15.4	5 10.6	8 21.1	6 10.5	3 18.8	2 7.7	16 15.7	9 22.5	2 22.2	22 15.8
ANCASH	8	0 0.0	0 0.0	11 23.4	2 5.3	16 28.1	0 0.0	0 0.0	24 23.5	9 22.5	1 11.1	27 19.4
	COLUMN TOTAL	24 17.3	13 9.4	47 33.8	38 27.3	57 41.0	16 11.5	26 18.7	102 73.4	40 28.8	9 6.5	139 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

139 VALID CASES 145 MISSING CASES

Vars	401	403	405	407	409	411	413	415	417	419

TABLE IV-36 (continued)

* * * C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY MEDICIN2 (GROUP) MEDICINA NRO. 2

VAR001	COUNT / COL PCT	MEDICIN2 pepsamar (Pepsmar) 1	aldrox (Aldrox) 2	anti-diarrheals (Anti-diarreico) 3	multi-vitamins (Multi-vitaminico) 4	undecilinic acid (Acido-undecilenico) 5	with zinc (Undecilenato de zinc) 6	dexa-metazone (dexametazona) 7	ferrous gluconate (Gluconato ferroso) 8	fiti-quinone (fitiquinona) 9	eydrops (Gotas oticas) 10	ROW TOTAL
PIURA-TUMBES	1	0 0.0	1 2.4	9 12.3	4 17.4	1 16.7	0 0.0	4 13.3	1 1.9	0 0.0	2 8.0	13 10.1
SAN MARTIN	2	4 14.3	3 7.1	11 15.1	4 8.9	2 33.3	2 28.6	2 6.7	7 13.2	2 10.5	2 8.0	12 9.3
HUANUCO-PASCO-UCAYAL	3	0 0.0	2 4.8	11 15.1	6 13.3	0 0.0	0 0.0	3 10.0	2 3.8	3 15.8	1 4.0	15 11.6
CALLAO	4	2 7.1	12 28.6	11 15.1	3 6.7	2 33.3	2 28.6	4 13.3	9 17.0	3 15.8	3 12.0	13 10.1
ICA	5	0 0.0	0 0.0	5 6.8	2 4.4	0 0.0	0 0.0	1 3.3	18 34.0	1 5.3	4 16.0	21 16.3
AREQUIPA	6	2 7.1	1 2.4	7 9.6	4 8.9	0 0.0	0 0.0	7 23.3	4 7.5	3 15.8	7 28.0	9 7.0
PUNO	7	2 7.1	2 4.8	11 15.1	12 26.7	1 16.7	3 42.9	6 20.0	7 13.2	7 36.8	4 16.0	18 14.0
ANCASH	8	16 54.3	21 50.0	8 11.0	5 13.3	0 0.0	0 0.0	3 10.0	5 9.4	0 0.0	2 8.0	28 21.7
	COLUMN TOTAL	28 21.7	42 32.6	73 56.6	45 34.9	6 4.7	7 5.4	30 23.3	53 41.1	19 14.7	25 19.4	129 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

129 VALID CASES 155 MISSING CASES

Vars	421	423	425	427	429	431	433	435	437	439

TABLE IV-36 (concluded)

* * * CROSSTABULATION * * *

VAR001 REGION DE SALUD
BY MEDICIN3 (GROUP) MEDICINA NRO. 3

COUNT / COL PCT	MEDICIN3 phenobarb. Fenobarbital 1	thia-bendazole Tiabendazol 2	bron-hydrate Bronhidrato 3	chloro-pheniram Clorofeniramina 4	cipro-heptadine Ciproheptadina 5	lidocaine Lidocaina 6	ergo-metrine Ergometrina 7	penicillin Penicilina 8	condoms Condones 9	vaginal tabs. Tabletas Vag. 10	ROW TOTAL
VAR001											
1 PIURA-TUMBES	4 21.1	4 8.0	2 13.3	9 30.0	2 14.3	3 7.3	1 3.0	4 8.5	1 2.9	1 3.4	15 11.7
2 SAN MARTIN	2 10.5	4 8.0	2 13.3	8 26.7	7 50.0	3 7.3	9 27.3	7 14.9	2 5.7	2 6.9	12 9.4
3 HUANUCO-PASCO-UCAYAL	0 0.0	5 10.0	1 6.7	4 13.3	1 7.1	3 7.3	5 15.2	3 6.4	2 5.7	0 0.0	13 10.2
4 CALLAO	2 10.5	4 8.0	4 26.7	3 10.0	2 14.3	6 14.6	2 6.1	2 4.3	1 2.9	1 3.4	8 6.3
5 ICA	0 0.0	1 2.0	2 13.3	0 0.0	0 0.0	1 2.4	0 0.0	5 10.6	19 54.3	15 51.7	24 18.8
6 AREQUIPA	5 26.3	3 6.0	1 6.7	5 16.7	1 7.1	9 22.0	5 15.2	10 21.3	2 5.7	3 10.3	11 8.6
7 PUNO	4 21.1	7 14.0	1 6.7	0 0.0	0 0.0	1 2.4	5 15.2	12 25.5	5 14.3	5 17.2	18 14.1
8 ANCASH	2 10.5	22 44.0	2 13.3	1 3.3	1 7.1	15 36.6	6 18.2	4 8.5	3 8.6	2 6.9	27 21.1
COLUMN TOTAL	19 14.8	50 39.1	15 11.7	30 23.4	14 10.9	41 32.0	33 25.8	47 36.7	35 27.3	29 22.7	128 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

128 VALID CASES 154 MISSING CASES

Vars 441 443 445 447 449 451 453 455 457 459

As for first aid supplies, promoters-respondents (N=192) had, at the time of the survey, the following stock:

1) Cotton (84% of promoters responding
2) Gauze (74%)
3) Tape (66%)
4) Alcohol/iodine (57%)
5) Germicidal soap (43%)
6) Sulfa powder (36%)
7) Benzine (23%)
8) Butezine picrate (16%)

In general, promoters are low on disinfectants, which raises major questions about their ability to do much of the first aid normally required of them at even minimal levels of antisepsis.

Finally, there is the issue of drug supply. Ranked in descending order of frequency, the following percentages of promoters had the following pharmaceuticals* at the time of the survey:

1)	Aspirin	73%
2)	Anti-diarrheals (without neomycin)	57%
3)	Dipirona (injectable)	41%
	Ferrous gluconate	41%
4)	Thiabendazole	39%
5)	Penicillin	37%
6)	Multivitamins	35%
7)	Homatropine	34%
8)	Aldrex	33%
9)	Lidocaine	32%
10)	Dipirone (tablets)	29%
11)	Hyoscine bromate	27%
	Condoms	27%
12)	Ergotrate	26%
13)	Chlorpheniramine (chlortrimeton)	23%
	Dexamethasone	23%
	Vaginal contraceptives (neo-sampoon)	23%
14)	Pepsamar	22%
15)	Optical drops	19%
16)	Atropine sulfate	17%
17)	Phenobarbital	15%
	Fitiquinone	15%
18)	Dextromethorphan	12%

* The following list is based on a bilingual mix of trade and generic descriptives as informally used by the MOH.

19)	Sulfametoxipyridazine	11.5%
20)	Benadryl	9%
21)	Maalox	6.5%
22)	Zinc ointment	5%
	Desenex	5%.

The only medicines that over one-half of the promoters have are aspirin and anti-diarrheals. Even though the number who have other medicines is low, the number who actually use them is even lower. The promoter is essentially a dispenser of aspirins and a few analgesics, a giver of first aid treatment for cuts and bruises, and an injecter; the injected medications are usually brought to him by patients or prescribed by himself, the sanitario, or the pharmacist from whom the medication was purchased. As for anything else, the promoter's stock is inadequate, if not non-existent.

H. The Supervision of the Promoter (Vars. 273-287)

As discussed in Chapters III and IV, promoter supervision is problematic, for both supervisors and those supervised.

Forty-six percent of promoter-respondents (N=236) said that their most frequent supervisory visits are paid by the sanitario based in the Health Post; for 17% it was the nurse from the corresponding Health Center; and 14% reported frequency of visits by individuals from miscellaneous sources (Regional Office, auxiliary nurse, PVOs, and foreign donors). However, 22% said that they had received supervisory visits from no one; highest frequencies of "no visits" were encounterd in Callao, Huánuco, Puno, and Arequipa, and lowest frequencies were in Ancash, San Martín, and Ica.

Looked at from a slightly different perspective -- frequency of supervisory visits from Health Center personnel -- one-third of promoters responding (N=171) reported a visit once a month, one-fifth reported a visit every other month, and another fifth reported a visit every three months. For the approximate one-third remaining, such visits were very infrequent.

The dominant activity of supervisors when they do visit, as reported by 73% of promoter respondents, is to ask about the promoter's work (preguntan sobre su trabajo). Another 10% are described as copying and gathering data. Only 10% of promoters indicated that their supervisors showed them new skills or ways of doing things (enseñar nuevos métodos). The balance of supervisory activities is a melange of seeing patients (three cases), doing vaccinations (three cases), and some supplying (two cases). Only one supervisor was reported as bestowing harsh criticism.

As for any reverse supervisory or logistical flow, as reflected in visits by the promoter him- or herself to the Health Post or Health Center, one-fourth of respondents reported visits to the Health Center once a month; one-fifth reported high frequencies of several times a week. Fifty-six percent said they never visit the Health Center; however, the total N (68) is small. Health Post visits by the promoter are somewhat higher: of 115 promoter-respondents, 36.5% said they went to the Health Post once a month, 19% several times a week, and 10% one

to four times a year, but 20% said they almost never visited their Health Post.

The information system that might enhance or at least partially substitute for direct personal supervision is almost totally non-functional. Although 80% of respondents (N=236) indicated that they keep written records of their activities (Var. 280), there is substantial variation from region to region: the high was the 96% positive response from Ica, the lows the 64% from Piura and 72% from Arequipa.

More important in the scheme of things is the quality of what record-keeping does occur (Vars. 281-284, 287). For 95% of promoters, record-keeping is patient registration, trailed well behind by the 51% who note medications and dosages (see Table IV-37). Almost no promoters keep records of their preventive activities or referrals, and the numbers who maintain any record of prenatal or well-baby care are minuscule. Most promoters keep such records in school notebooks, following some sequence or form they largely invent themselves; few have standardized reporting forms which might flow into at least some area or regional system and, in fact, most regions appear to have no such system, either for epidemiological reporting or management purposes.

I. Promoter Incentives (Vars. 288-296, 336-341, 353-355)

There are a number of potential sources of incentives for promoters: sales of medicines, fees for services, various sorts of emoluments, upward mobility in the public health system, support from the community and the different levels of the Ministry of Health, and job satisfaction.

We have already discussed, in Chapters III, V, and earlier in this chapter, the scantiness of support from the community and the public health system for the promoter, as well as the ambivalence and lack of consensus about the promoter role in general. Chapter III also spelled out the limitations on promoter upward mobility in the public health system, most particularly the (erroneous) perception of promoters as being undereducated for larger responsibilities.

1. Sale of Medicines

The contents and functioning of the promoter's drug supply were discussed earlier in this chapter. What came clear was that promoter expenditures on pharmaceuticals are quite variable, within and among regions, but that it was not unreasonable to talk tentatively about an average pharmaceutical expenditure per month per promoter of s/15,000.

Even if one were to accept this expenditure estimate, elaborate conclusions from the survey data about what promoters charge for medicines are frankly impossible. The length of the survey questionnaire was already substantial: the addition of the level of detail necessary to get an accurate picture of what promoters charge for what medicines in what quantities would have made it unbearably long. In fact, given the erratic fashion in which most promoters obtain pharmaceuticals, lapses of time and memory (a number of medicines in promoters' supplies were outdated),

TABLE IV-37

PROMOTOR RECORD-KEEPING
MANTENIMIENTO DE REGISTROS DE LOS PROMOTORE

* * * C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY INFO (GROUP) TIPO DE INFORMACION

VAR001	COUNT / COL PCT	1 REGIST. DE PACIENTES (patient registry)	2 Medic + dosis (medications and dosages)	3 Activ preventivas (preventive activities)	4 Transferencias (referrals)	5 otro (other)	ROW TOTAL
PIURA-TUMBES	1	17 9.5	6 6.3	0 0.0	0 0.0	1 3.4	18 9.5
SAN MARTIN	2	27 15.1	12 12.5	2 66.7	0 0.0	2 6.9	27 14.3
HUANUCO-PASCO-UCAYAL	3	22 12.3	11 11.5	1 33.3	1 20.0	2 6.9	22 11.6
CALLAO	4	19 10.6	6 6.3	0 0.0	1 20.0	13 44.8	25 13.2
ICA	5	25 14.0	20 20.8	0 0.0	0 0.0	1 3.4	26 13.8
AREQUIPA	6	17 9.5	6 6.3	0 0.0	0 0.0	0 0.0	18 9.5
PUNO	7	27 15.1	12 12.5	0 0.0	2 40.0	9 31.0	28 14.8
ANCASH	8	25 14.0	23 24.0	0 0.0	1 20.0	1 3.4	25 13.2
	COLUMN TOTAL	179 94.7	96 50.8	3 1.6	5 2.6	29 15.3	189 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

189 VALID CASES 95 MISSING CASES

VCRS 281 282 283 284 287

the fact that some pharmaceuticals are donated, the small quantities in which most promoters supply their patients, and the sheer diversity of pharmaceuticals handled by promoters, the subject demands a survey in itself.

Breakdowns of the data on pharmaceutical costs obtained in both the promoter and community surveys (described in J. below) are presented in comparative fashion in Table IV-38. The most provocative comparisons are between Columns a) and b), and b) and c). First, it is interesting that community members and promoters have such widely divergent perceptions of charges and costs: community members see themselves as paying, on the average, up to six times as much (e.g., Ancash) for medicines to the promoter as promoters themselves state they charge.

Second, in general, community members see their expenses for medicines purchased at the pharmacy as much smaller than their promoter-related pharmaceutical expenses. It is dangerous to make too much of this, but it is not a totally surprising finding. In El Salvador (see Harrison, 1976), as one example, patients saw the Health Post as more expensive than the local pharmacy in general -- an almost completely specious perception.

2. Fees for Services

Table IV-39 compares promoter statements on their charges for various services with community responses to a question on the average cost of a consultation (consulta) with a promoter. Columns 1 and 2 are direct comparisons of what community members said they paid for a medical consultation with a promoter, and the promoter said he charged for such a consultation. For all eight Health Regions, community members (on the average) claimed to be charged as much as 16 times what promoters said their fees were. This trend is repeated in all regions in varying degrees. One must keep in mind, however, that these figures are based on a small number of respondents, so the order of magnitude may not necessarily be accurate. Still we do feel that the consistent pattern of sizeable differences is real.

Furthermore, these quantitative results agree with the qualitative data gathered in the medical case studies presented in Chapter V. In these cases, promoters consistently quoted very low (if not unrealistic) prices, which may be what they were told to charge a number of years ago. With an inflation rate of 125% in 1983, it should not be surprising that promoter fees would have gone up as well, albeit in some cases quite out of proportion. It is also possible that community residents may have exaggerated some of the charges, but we are prepared to say there is a 5-10 factor of difference betwen the two sets of figures related to fees-for-services.

At least part of these contradictory and erratic patterns comes from the identity of who stipulates the fees that promoters charge for medicines and services (Var. 296). In the main (50% of 217 valid cases), it is the promoter who stipulates the charges. In another 26% of cases, it is some entity or representative of the MOH. In the balance of cases, prices are stipulated either by no one or by some special entity such as CIPCA or, in Puno, the Promoters' Association.

TABLE IV-38

AVERAGE COSTS OF MEDICINES REPORTED BY PROMOTER AND COMMUNITY SURVEY POPULATIONS
(Vars. 147, 187, 291)

Region	a) Average Cost of Medicines Distributed by Promoters *			b) Average Cost of Medicines Paid by Community Members to Promoters**			c) Average Cost of Pharmaceutical Purch. at Pharmacies by Communities Members***		
For Entire Population	1,454	(SD 191	(79)****	7,187	(SD 1,266)	(303)	1,365	(SD 1,702)	(616)
Piura-Tumbes	2,450	(SD.0000)	(1)	8,791	(SD 844)	(13)	1,736	(SD 1,902)	(108)
San Martín	2,800	(SD 403)	(8)	7,326	(SD 1,661)	(50)	946	(SD 1,455)	(64)
Huánuco	2,550	(SD 150)	(21)	10,532	(SD 1,500)	(93)	1,751	(SD 1,819)	(119)
Callao	2,500	(SD.000)	(1)	9,445	(SD 1,992)	(6)	1,589	(SD 1,751)	(90)
Ica	1,971	(SD 116)	(7)	4,058	(SD 1,008)	(41)	1,331	(SD 1,604)	(80)
Arequipa	2,825	(SD 185)	(4)	7,353	(SD 980)	(34)	642	(SD 889)	(59)
Puno	689	(SD 44)	(11)	3,229	(SD 397)	(24)	1,023	(SD 1,715)	(77)
Ancash	613	(SD 109)	(26)	3,977	(SD 594)	(42)	957	(SD 1,384)	(19)

In soles of February-March 1984: s/2,400 = US$1.00

* Data from promoter survey interviews; number of valid cases 79 (28% of 284).
** Data from community survey interviews, number of valid cases 303 (13% of 2,345).
*** Data from community survey interviews, number of valid cases 616 (26% of 2,345).
**** SD = standard deviations; the other parenthetical numbers are valid cases.

Table IV-39

AVERAGE FEES FOR SERVICES: COMPARISON OF DATA FROM PROMOTER AND COMMUNITY SURVEYS

	Community Report on Average Cost per Promoter Consulta	Promoter-Reported Fees for Services: Consulta/ Atencion	First Aid	Wound Dressings (Curaciones)	Injections	Assistance at Childbirth
Region						
For Entire Population	6,844	432	508	571	424	3,406
Piura-Tumbes	13,196	350	300	250	385	10,408
San Martín	6,841	183	1793	2,277	922	2,650
Huánuco	4,911	581	955	1,062	504	7,000
Callao	18,893	n.d.	139	242	463	3,667
Ica	19,291	100	229	277	294	n.d.
Arequipa	3,648	595	466	n.d.	450	4,275
Puno	4,268	423	250	258	183	840
Ancash	3,035	150	311	305	193	560

In soles of February-March 1984: s/2,400 = US$1.00.

Close to half of promoter respondents (total N=233) said that, nevertheless, they received no income (remuneración) for their activities. Thirty-eight percent were renumerated in money, 7% in gifts, 6% from profits from sales of medicines, .4% got relief from their community work responsibilities (minga), and 1.3% answered that they accepted whatever clients wanted to pay (voluntad).

For the 73 cases of promoters who gave adequate information on monthly income, the average was s/89,764 (see Table IV-40). From this must be subtracted the s/15,000 minimum that promoters take out of their pockets for pharmaceutical purchases (see above), as well as what they estimate their promoter activities cost them in foregone income (Vars. 353-354). Fifty-three percent of promoter-respondents said that their promoter work did take away time from their regular income-generating activities and represented foregone income. The average monthly amount of this foregone income for the entire population of valid cases (N=107) was s/56,607. The standard deviation was quite high (7,544) and the range was from an estimated monthly loss of s/2,000 for a female promoter in Puno to a high of s/88,401 for some male promoters in Huanuco (see Table IV-41). Thus if the average monthly income per promoter is s/89,764, and this is reduced by the s/15,000 average minimum monthly expenditure for pharmaceuticals and by the average of s/56,607 in foregone income, the promoter is left with a net profit of s/16,794, or, the equivalent of a little over US$5.00 at the time of this study. This could be wiped out in one or two un-reimbursed round trips to the Health Center for supervision or re-stocking, or a round trip to take an emergency patient into a Health Center or Local Hospital.

J. Most Important Community Perceptions of the Promoter and the Promoter Role

This section responds to the portion of the Scope of Work which stipulated a sample survey in at least 50 communities, to assess the cost and acceptability of promoter service and community participation and the acceptability of promoter selection. Costs of services were covered in the previous section; we will therefore concentrate here on perception of promoter role, selection process, and services.

1. Perception of Promoter Role

Across the eight Health Regions in our sample, 83.5% of the 2,345 community respondents said they had health promoters working in their communities. The lowest percentage (65.7) was in Ica and the highest in San Martin (93.1) (see Table IV-42).

In an open-ended question, the respondents were asked to define exactly what a health promoter was (Var. 43). 63% of respondents (N=2,200) said that the promoter was someone who gave primary care (servicios primarios) or first aid (primeros auxilios) (see Table IV-43). An unnervingly high 29% indicated that they did not know what a health promoter was or did. Thus, the community residents in our sample either perceive the promoter as someone who does curative medicine

- D E S C R I P T I O N O F S U B P O P U L A T I O N S - - - - - - - - - - - - - - - - - - -

CRITERION VARIABLE VAR337 DINERO
BROKEN DOWN BY VAR001 REGION DE SALUD
BY VAR009 SEXO DEL PROMOTOR

TABLE IV-40

PROMOTER AVERAGE CASH INCOME FROM PROMOTER ACTIVITIES
INGRESO EFECTIVO MENSUAL PROMEDIO DE LAS ACTIVIDADES DE LOS PROMOTORES

VARIABLE	VALUE	LABEL	MEAN	STD DEV	CASES
FOR ENTIRE POPULATION			897.6438	1687.6085	73
VAR001	1	PIURA-TUMBES	734.8750	1176.6327	8
VAR009	1	MUJER	1269.6667	1936.9978	3
VAR009	2	HOMBRE	414.0000	451.2538	5
VAR001	2	SAN MARTIN	217.2308	284.0989	13
VAR009	1	MUJER	1009.0000	.0000	1
VAR009	2	HOMBRE	151.2500	162.2025	12
VAR001	3	HUANUCO-PASCO-UCAYA.	2242.8571	2482.6984	14
VAR009	1	MUJER	4070.0000	3360.3571	5
VAR009	2	HOMBRE	2338.8889	2083.5333	9
VAR001	4	CALLAO	933.3333	602.7714	3
VAR009	1	MUJER	900.0000	848.5281	2
VAR009	2	HOMBRE	1000.0000	.0000	1
VAR001	6	AREQUIPA	1409.0909	2598.2281	11
VAR009	1	MUJER	123.3333	92.9157	3
VAR009	2	HOMBRE	1491.2500	2944.0324	8
VAR001	7	PUNO	217.6667	260.7329	15
VAR009	2	HOMBRE	217.6667	260.7329	15
VAR001	8	ANCASH	428.8889	464.0971	9
VAR009	1	MUJER	866.6667	550.7571	3
VAR009	2	HOMBRE	210.0000	225.3886	6

TOTAL CASES = 284
MISSING CASES = 211 OR 74.3 PCT.

- D E S C R I P T I O N O F S U B P O P U L A T I O N S - - - - - - - - - - - - - - - - - -

CRITERION VARIABLE VAR355 CANTIDAD/MES
BROKEN DOWN BY VAR001 REGION DE SALUD
BY VAR009 SEXO DEL PROMOTOR

TABLE IV-41
MONTHLY INCOME FORESOME BY PROMOTERS DUE TO DEMANDS OF PROMOTER ACTIVITIES
INGRESO MENSUAL SACRIFICADO POR LOS PROMOTORES DEBIDO A DEMANDAS DE SU ROL

VARIABLE	VALUE	LABEL	MEAN	STD DEV	CASES
FOR ENTIRE POPULATION			5660.7570	7544.7338	107
VAR001	1	PIURA-TUMBES	5888.8889	4196.5594	9
VAR009	1	MUJER	6000.0000	3605.5513	3
VAR009	2	HOMBRE	5833.3333	4792.3550	6
VAR001	2	SAN MARTIN	2260.0000	3730.7219	15
VAR009	2	HOMBRE	2260.0000	3730.7219	15
VAR001	3	HUANUCO-PASCO-UCAYAL	8347.4211	10388.4302	19
VAR009	1	MUJER	6500.0000	1732.0508	4
VAR009	2	HOMBRE	8840.0667	11699.3844	15
VAR001	4	CALLAO	5961.1111	6805.8696	9
VAR009	1	MUJER	5235.7143	6701.7855	7
VAR009	2	HOMBRE	8500.0000	9192.3882	2
VAR001	5	ICA	4050.0000	5762.8986	6
VAR009	1	MUJER	4050.0000	5762.8986	6
VAR001	6	AREQUIPA	5636.3636	5423.3334	11
VAR009	1	MUJER	7000.0000	6603.0296	6
VAR009	2	HOMBRE	4000.0000	3590.9609	5
VAR001	7	PUNO	6259.0909	10336.2166	22
VAR009	1	MUJER	200.0000	.0000	1
VAR009	2	HOMBRE	8642.8571	10431.7099	21
VAR001	8	ANCASH	2409.3750	1531.9072	16
VAR009	2	HOMBRE	2409.3750	1531.9072	16

TOTAL CASES = 264
MISSING CASES = 177 OR 62.3 PCT.

$\bar{x}$ Ref = 56.660 soles

VAR001 REGION DE SALUD — CROSSTABULATION OF — BY VAR030 PROMOTOR DE SALUD — PAGE 1 OF 1

TABLE IV-42
COMMUNITY KNOWLEDGE OF PRESENCE OF PROMOTER
CONOCIMIENTO DE LA COMUNIDAD DE LA PRESENCIA DEL PROMOTOR

VAR001	COUNT / ROW PCT / COL PCT	VAR030 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	212 88.3 11.3	19 7.9 7.0	9 3.8 9.0	240 10.7
SAN MARTIN	2	283 93.1 15.1	16 5.3 5.9	5 1.6 5.0	304 13.5
HUANUCO-PASCO-UC	3	282 83.4 15.0	51 15.1 18.9	5 1.5 5.0	338 15.1
CALLAO	4	237 84.3 12.6	38 13.5 14.0	6 2.1 6.0	281 12.5
ICA	5	190 65.7 10.1	46 15.9 17.0	53 18.3 53.0	289 12.9
AREQUIPA	6	246 82.0 13.1	42 14.0 15.5	12 4.0 12.0	300 13.4
PUNO	7	238 84.1 12.7	40 14.1 14.8	5 1.8 5.0	283 12.6
ANCASH	8	186 88.6 9.9	19 9.0 7.0	5 2.4 5.0	210 9.4
	COLUMN TOTAL	1874 83.5	271 12.1	100 4.5	2245 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
188.49921	14	0.0	9.354	NONE

NUMBER OF MISSING OBSERVATIONS = 100

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR043 DEFIN. PROMOTOR DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	1 sells medicine VENDE MEDICINAS	2 gives PHC PREST.SERV.PRIM.	3 gives first aid PREST.PRIM.AUXIL	4 PERSONA TRAB. PO	5 PERSONA ATIEND.NO	6 SANITARI O	7	8 don't know DESCON.NUNCA ESC	ROW TOTAL
PIURA-TUMBES	1	2	68	94	8	1	4		61	238
		.8	28.5	39.5	3.4	.4	1.7		25.6	10.8
		3.3	9.5	14.2	8.8	6.3	20.0		9.7	
SAN MARTIN	2	8	87	73	3		5		109	285
		2.8	30.5	25.6	1.1		1.8		38.2	13.0
		13.3	12.2	11.0	3.3		25.0		17.2	
HUANUCO-PASCO-UC	3	7	95	88	11	2	4	2	108	317
		2.2	30.0	27.8	3.5	.6	1.3	.6	34.1	14.4
		11.7	13.3	13.3	12.1	12.5	20.0		17.1	
CALLAO	4	2	104	101	14	7	1		56	285
		.7	36.5	35.4	4.9	2.5	.4		19.6	13.0
		3.3	14.5	15.2	15.4	43.8	5.0		8.9	
ICA	5	2	87	93	28	1			81	292
		.7	29.8	31.8	9.6	.3			27.7	13.3
		3.3	12.2	14.0	30.8	6.3			12.8	
AREQUIPA	6	6	117	73	8	2			90	296
		2.0	39.5	24.7	2.7	.7			30.4	13.5
		10.0	16.4	11.0	8.8	12.5			14.2	
PUNO	7	5	84	67	9		6		104	275
		1.8	30.5	24.4	3.3		2.2		37.8	12.5
		8.3	11.7	10.1	9.9		30.0		16.5	
ANCASH	8	28	73	75	10	3			23	212
		13.2	34.4	35.4	4.7	1.4			10.8	9.6
		46.7	10.2	11.3	11.0	18.8			3.6	
	COLUMN TOTAL	60	715	664	91	16	20	2	632	2200
		2.7	32.5	30.2	4.1	.7	.9	.1	28.7	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
259.57364	49	0.0000	0.193	24 OF 64 (37.5%)

NUMBER OF MISSING OBSERVATIONS = 145

TABLE IV-43. COMMUNITY DEFINITION OF PROMOTER ROLE
DEFINICIO DE LA COMUNIDAD DEL ROL DEL PROMOTOR

or else simply do not recognize the role. This emphasis on the curative dimension by community respondents corresponds to promoters' own stated predilections.

When asked what sex was preferred for the promoter, there was a split between males and females, with some interesting regional variations (see Table IV-44). In Callao and Ica, respondents preferred females while in the other regions, males were preferred; this corresponds to the existing distribution of male and female promoters (see beginning of this chapter).

The reasons for such preferences seemed very clear in respondents' minds (see Table IV-45): those who preferred males said it was because they could go out at night, and those in favor of females felt that women inspired more confidence and trust. This does not differ from the institutional perceptions presented in Chapter III which provoked discussion of the possibility of training couples or at least one promoter of each sex in each community. There remains, of course, the role of the TBA to be contemplated in this formulation, as well as issues of cost.

2. Promoter Selection

Fifty-five percent of the community respondents who had a promoter in their community knew who had selected the promoter; of those, 58% said community members had been the primary agent of selection (see Tables IV-46 and IV-47). However, only 35% of the sample had themselves participated in promoter selection. Speaking regionally, only in Puno and Ancash had more than 50% of the community members interviewed participated in promoter selection; in the other regions. only about one-third participated. Lowest participation rates were found were in Ica and Arequipa (see Table IV-48).

The results of the community survey confirmed the qualitative data from both MOH institutional interviews (see Chapter III) and from the case studies, that few community members really participate actively in promoter selection. The actual process or dynamic in each community most certainly varies with regard to the influence of local leaders and/or Regional and Area Ministry of Health personnel, but in most cases, this participation seems largely pro forma.

3. Promoter Services

Out of 2,192 valid responses, 52% community respondents said they had at one time or another gone to a promoter for a health problem. As shown in Table IV-49, positive response rates were significantly higher for Piura-Tumbes, Huánuco, Puno, and Ancash; and significantly lower than the sample-wide mean for the other four Health Regions.

The most common problems that community respondents went to promoters for were, in descending order of incidence: colds and influenza, diarrhea, fever, sick children, injections, and injuries (Var. 56). This order of incidence was consistent across the eight Health Regions

- C R O S S T A B U L A T I O N O F -
VAR001 REGION DE SALUD BY VAR048 EL SEXO PREFERIDO DEL PROMOTOR
- PAGE 1 OF 1

TABLE IV-44. COMMUNITY PREFERENCE CONCERNING SEX OF PROMOTER
PREFERENCIA DE LA COMUNIDAD CON RESPECTO AL SEXO DEL PROMOTOR

VAR001	COUNT / ROW PCT / COL PCT	VAR048 HOMBRE male 1	MUJER female 2	AMBOS either 3	ROW TOTAL
PIURA-TUMBES	1	127 50.4 11.1	104 41.3 11.1	21 8.3 14.5	252 11.4
SAN MARTIN	2	204 68.7 17.9	78 26.3 8.4	15 5.1 10.3	297 13.4
HUANUCO-PASCO-UC	3	195 60.6 17.1	116 36.0 12.4	11 3.4 7.6	322 14.5
CALLAO	4	81 27.9 7.1	195 67.2 20.9	14 4.8 9.7	290 13.1
ICA	5	50 18.1 4.4	200 72.2 21.4	27 9.7 18.6	277 12.5
AREQUIPA	6	154 51.2 13.5	122 40.5 13.1	25 8.3 17.2	301 13.6
PUNO	7	184 69.7 16.1	69 26.1 7.4	11 4.2 7.6	264 11.9
ANCASH	8	146 67.6 12.8	49 22.7 5.3	21 9.7 14.5	216 9.7
	COLUMN TOTAL	1141 51.4	933 42.0	145 6.5	2219 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
320.94328	14	0.0	14.114	NONE

NUMBER OF MISSING OBSERVATIONS = 126

CROSSTABULATION OF
VAR001 REGION DE SALUD BY VAR049 RAZ.PARA QUE EL PROM.SEA HOMB. O MUJER
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	man knows more M.SABE MAS, DA P 1	man can go around M.PUEDE SALIR NO 2	man stronger M.MAS FUERTE, AU 3	woman more responsible M.ES MAS RESPONS 4	women inspires conf. M.DA MAS CONFIAN 5	woman treats better M.TRATA MEJOR CO 6	both better LOS DOS SEXOS 7	either NO IMPORTA 8	ROW TOTAL
PIURA-TUMBES	1	36	43	35	30	58	6	9	20	237
		15.2	18.1	14.8	12.7	24.5	2.5	3.8	8.4	10.8
		12.0	6.8	19.4	16.7	9.0	9.0	17.0	14.5	
SAN MARTIN	2	59	121	19	12	60	2	6	17	296
		19.9	40.9	6.4	4.1	20.3	.7	2.0	5.7	13.5
		19.6	19.3	10.6	6.7	9.3	3.0	11.3	12.3	
HUANUCO-PASCO-UC	3	36	113	27	20	82	9	10	12	309
		11.7	36.5	8.7	6.5	26.5	2.9	3.2	3.9	14.1
		12.0	18.0	15.0	11.1	12.8	13.4	18.9	8.7	
CALLAO	4	34	39	13	34	147	7	3	13	290
		11.7	13.4	4.5	11.7	50.7	2.4	1.0	4.5	13.2
		11.3	6.2	7.2	18.9	22.9	10.4	5.7	9.4	
ICA	5	24	17	18	44	132	13	9	24	281
		8.5	6.0	6.4	15.7	47.0	4.6	3.2	8.5	12.8
		8.0	2.7	10.0	24.4	20.5	19.4	17.0	17.4	
AREQUIPA	6	46	70	32	16	92	12	12	25	305
		15.1	23.0	10.5	5.2	30.2	3.9	3.9	8.2	13.9
		15.3	11.1	17.8	8.9	14.3	17.9	22.6	18.1	
PUNO	7	28	125	23	14	39	17	2	9	257
		10.9	48.5	8.9	5.4	15.2	6.6	.8	3.5	11.7
		9.3	19.9	12.8	7.8	6.1	25.4	3.8	6.5	
ANCASH	8	38	100	13	10	33	1	2	18	215
		17.7	46.5	6.0	4.7	15.3	.5	.9	8.4	9.8
		12.6	15.9	7.2	5.6	5.1	1.5	3.8	13.0	
	COLUMN TOTAL	301	628	180	180	643	67	53	138	2190
		13.7	28.7	8.2	8.2	29.4	3.1	2.4	6.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
427.39173	49	0.0000	5.203	NONE

NUMBER OF MISSING OBSERVATIONS = 155

TABLE IV-45. REASONS FOR COMMUNITY PREFERENCE CONCERNING SEX OF PROMOTER
RAZONES PARA LA PREFERENCIA DE LA COMUNIDAD CON RESPECTO AL SEXO DE LOS PROMOTORES

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR050 CONOCIM. SOBRE QUIEN ELIGIO AL PROMOT.
PAGE 1 OF 1

TABLE IV-46. COMMUNITY KNOWLEDGE ABOUT PROMOTER SELECTION PROCESS
CONOCIMIENTO DE LA COMUNIDAD ACERCA DEL PROCESO DE SELECCION DE LOS PROMOTORES

VAR001	COUNT / ROW PCT / COL PCT	VAR050: 1 SI (yes)	2 NO (no)	3 NO SABE (don,t know)	ROW TOTAL
PIURA-TUMBES	1	133	51	55	239
		55.6	21.3	23.0	10.9
		11.0	11.7	10.0	
SAN MARTIN	2	178	64	44	286
		62.2	22.4	15.4	13.0
		14.7	14.7	8.0	
HUANUCO-PASCO-UC	3	190	71	50	311
		61.1	22.8	16.1	14.1
		15.7	16.3	9.1	
CALLAO	4	156	34	84	274
		56.9	12.4	30.7	12.5
		12.9	7.8	15.2	
ICA	5	78	74	146	298
		26.2	24.8	49.0	13.6
		6.4	17.0	26.4	
AREQUIPA	6	152	77	75	304
		50.0	25.3	24.7	13.8
		12.6	17.7	13.6	
PUNO	7	164	30	72	266
		61.7	11.3	27.1	12.1
		13.5	6.9	13.0	
ANCASH	8	160	34	26	220
		72.7	15.5	11.8	10.0
		13.2	7.8	4.7	
	COLUMN TOTAL	1211	435	552	2198
		55.1	19.8	25.1	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
204.88596	14	0.0	43.540	NONE

NUMBER OF MISSING OBSERVATIONS = 147

1211 know who selected promo & how selected

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR051 PERSONA O ENT.RESP.PARA ELEGIR PROMOT.

VAR001 — COUNT / ROW PCT / COL PCT	1 health committee COMITE DE SALUD	2 mayor ALCALDE	3 sanitario or health auxiliary SANIT.O AUX-ENFE	4 etr.staff PERS. CENTRO DE	5 hospital staff PERS. DEL HOSPIT	6 community members MIEMB. COMUNIDAD	7 community leaders LIDERES DE COMUN	8 development committee COMITE DESARROL	10 other OTROS	ROW TOTAL
1 PIURA-TUMBES	6 3.9 28.6	1 .5 5.0	1 .6 1.2	3 1.9 4.8	4 2.6 5.9	103 66.5 13.1	3 1.9 15.8	4 2.6 66.7	30 19.4 11.2	155 11.7
2 SAN MARTIN		2 1.3 10.0	4 2.5 4.9	2 1.3 3.2	4 2.5 5.9	139 87.4 17.7	2 1.3 10.5		6 3.8 2.2	159 12.0
3 HUANUCO-PASCO-UC	5 2.6 23.8	1 .5 5.0	5 2.6 6.2	4 2.0 6.5	6 3.1 8.8	153 78.1 19.5	4 2.0 21.1	1 .5 16.7	17 8.7 6.4	196 14.7
4 CALLAO	1 .7 4.8			28 19.3 45.2		52 35.9 6.6			64 44.1 24.0	145 10.9
5 ICA	2 1.2 9.5		14 8.4 17.3	10 6.0 16.1	9 5.4 13.2	29 17.4 3.7	3 1.8 15.8	1 .6 16.7	99 59.3 37.1	167 12.6
6 AREQUIPA	6 3.7 28.6	13 7.9 65.0	9 5.5 11.1	13 7.9 21.0		94 57.3 12.0	2 1.2 10.5		27 16.5 10.1	164 12.3
7 PUNO	1 .6 4.8	1 .6 5.0	20 11.4 24.7	1 .6 1.6	1 .6 1.5	136 77.3 17.3	4 2.3 21.1		12 6.8 4.5	176 13.2
8 ANCASH		2 1.2 10.0	28 16.7 34.6	1 .6 1.6	44 26.2 64.7	80 47.6 10.2	1 .6 5.3		12 7.1 4.5	168 12.6
COLUMN TOTAL	21 1.6	20 1.5	81 6.1	62 4.7	68 5.1	786 59.1	19 1.4	6 .5	267 20.1	1330 100.0

1330 known
sto del 5

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
771.54471	55	0.0000	0.654	32 OF 72 (44.4%)

NUMBER OF MISSING OBSERVATIONS = 1015

TABLE IV-47. COMMUNITY KNOWLEDGE ABOUT ENTITY RESPONSIBLE FOR PROMOTER SELECTION
CONOCIMIENTO DE LA COMUNIDAD ACERCA DE LA ENTIDAD RESPONSABLE DE LA SELECCION DE LOS PROMOTORES

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR052 PARTICI.DEL INFOR.EN LA SELEC.DEL PROM

PAGE 1 OF 1

TABLE IV-48. COMMUNITY PARTICIPATION IN PROMOTER SELECTION
PARTICIPACION DE LA COMUNIDAD EN LA SELECCION DE LOS PROMOTORES

VAR001	COUNT / ROW PCT / COL PCT	VAR052 SI (yes) 1	VAR052 NO (no) 2	ROW TOTAL
PIURA-TUMBES	1	86	135	222
		38.7	61.3	10.6
		11.8	10.0	
SAN MARTIN	2	101	166	267
		37.8	62.2	12.8
		13.9	12.2	
HUANUCO-PASCO-UC	3	127	170	297
		42.8	57.2	14.2
		17.4	12.5	
CALLAO	4	92	180	272
		33.8	66.2	13.0
		12.6	13.3	
ICA	5	21	273	294
		7.1	92.9	14.1
		2.9	20.1	
AREQUIPA	6	64	238	302
		21.2	78.8	14.5
		8.8	17.5	
PUNO	7	114	97	211
		54.0	46.0	10.1
		15.6	7.1	
ANCASH	8	124	97	221
		56.1	43.9	10.6
		17.0	7.1	
	COLUMN TOTAL	729	1357	2086
		34.9	65.1	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
212.93843	7	0.0	73.739	NONE

NUMBER OF MISSING OBSERVATIONS = 259

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR055 CONSULTAS AL PROMOTOR
PAGE 1 OF 1

TABLE IV-49. COMMUNITY UTILIZATION OF THE HEALTH PROMOTER
UTILIZACION DE LA COMUNIDAD DE LOS PROMOTORES DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR055: SI (yes) 1	NO (no) 2	ROW TOTAL
PIURA-TUMBES	1	147 59.5 12.8	100 40.5 9.6	247 11.3
SAN MARTIN	2	117 43.0 10.2	155 57.0 14.9	272 12.4
HUANUCO-PASCO-UC	3	193 63.1 16.8	113 36.9 10.8	306 14.0
CALLAO	4	122 43.3 10.6	160 56.7 15.3	282 12.9
ICA	5	144 48.5 12.5	153 51.5 14.7	297 13.5
AREQUIPA	6	127 41.9 11.1	176 58.1 16.9	303 13.8
PUNO	7	156 59.1 13.6	108 40.9 10.4	264 12.0
ANCASH	8	143 64.7 12.4	78 35.3 7.5	221 10.1
	COLUMN TOTAL	1149 52.4	1043 47.6	2192 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
71.37043	7	0.0000	105.156	NONE

NUMBER OF MISSING OBSERVATIONS = 153

have ever used prom
approx 50 50
see Ver 82

and conforms with promoters' own responses and the broad epidemiological profiles of the areas surveyed.*

When asked who gave the best advice/treatment for the last illness in the family (Var. 83), the promoter was named in 32% of the 1,954 responses to this question. The second was the physician, with 29%. There are some interesting regional differences (see Table IV-50). In Ancash, for instance, over half the community respondents perceived the promoter as the best source of advice or treatment and in other regions the promoter was also highly rated. In contrast, in Ica and Callao, the physician was the choice of 56.5% and 45.9% of respondents, respectively. The reason may be that in Callao, which is primarily urban, most people have more access to Health Centers and Hospitals; in the case of Ica, the strong preventive emphasis in promoter training could account for the downward shift from the sample mean. In Piura-Tumbes, promoters and physicians are very close in community favor, with promoters running slightly ahead of physicians.

Using the Multiple Response Program, we made composite tables of community responses on promoter activities. Table IV-51 shows the clear emphasis on curative activities (first aid, cure of disease), but an unexpectedly high 29% also mentioned community meetings for educational talks. When asked to specify what services they had requested from the promoter during the past month, the largest number of community responses were for medical consultations, medicines, injections, and first aid (see Table IV-52). When people were asked if they had ever attended an educational or preventive talk given by a promoter, only 29% answered in the affirmative. The only significant regional variation was Puno, where 45% had attended.

Table IV-53 summarizes the topics of promoter charlas: hygiene and the importance of vaccinations lead the list. Family planning was also mentioned spontaneously by 19% of the respondents.

As a summary measure, a general question was asked about improvements in community health due to the promoter's activities, i.e., promoter impact. Most felt that there had been some improvements and specifically mentioned (in descending rank order): emergency treatments, first aid, less diarrhea, vaccinations, lower child morbidity and mortality, and referrals (see Table IV-54 for percentages and counts).

K. Promoter Satisfaction, Dissatisfaction, and Attrition

Although each interviewer was instructed to interview a ratio of four active to two inactive (pasivo) promoters, this was not always possible, The final N of inactive promoters was 38, 14% of the total interview sample. This produced a ratio of seven active to one inactive promoter, well below the two to one ratio we had hoped for (see Table IV-55). This was a bit surprising: the survey given to inactive promoters was

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* Available epidemiological data were gathered for each Region and Area as rough guidance.

VAR001 REGION DE SALUD — CROSSTABULATION OF — BY VAR083 LOS MEJORES CONSEJOS PARA LA ENFERMEDAD

PAGE 1 OF 2

VAR001	COUNT / ROW PCT / COL PCT	doctor MEDICO 1	promoter PROMOTOR DE SALUD 2	sanitario SANITARIO 3	nurse ENFERMERA/O 4	pharmacist FARMACEUTICO 5	midwife PARTERA 6	curandero CURANDERO/A 7	family member PARIENTE 8	friend AMIGO 10	11	ROW TOTAL
PIURA-TUMBES	1	69 32.1 12.1	72 33.5 11.5	15 7.0 8.6	4 1.9 12.1			1 .5 2.2	10 4.7 5.5	9 4.2 6.8		215 11.0
SAN MARTIN	2	39 15.8 6.9	82 33.2 13.1	33 13.4 18.9	3 1.2 9.1	2 .8 11.8	3 1.2 18.8	4 1.6 8.9	19 7.7 10.4	17 6.9 12.9		247 12.6
HUANUCO-PASCO-UC	3	66 22.0 11.6	104 34.7 16.6	10 3.3 5.7	6 2.0 18.2	2 .7 11.8	8 2.7 50.0	6 2.0 13.3	61 20.3 33.5	26 8.7 19.7		300 15.4
CALLAO	4	107 45.9 18.8	43 18.5 6.8	8 3.4 4.6	5 2.1 15.2	1 .4 5.9			11 4.7 6.0	28 12.0 21.2	1 .4 25.0	233 11.9
ICA	5	153 56.5 26.9	69 25.5 11.0	3 1.1 1.7	3 1.1 9.1	4 1.5 23.5			10 3.7 5.5	14 5.2 10.6	2 .7 50.0	271 13.9
AREQUIPA	6	82 31.3 14.4	74 28.2 12.4	68 25.9 27.4	7 2.7 21.2		3 1.1 18.8	9 3.4 20.0	9 3.4 4.9	13 5.0 9.8	1 .4 25.0	262 13.4
PUNO	7	23 9.7 4.0	69 29.0 11.0	32 13.4 18.3	4 1.7 12.1	2 .8 11.8	1 .4 6.3	23 9.7 51.1	48 20.2 26.4	19 8.0 14.4		238 12.2
ANCASH	8	30 16.0 5.3	100 53.2 15.9	26 13.8 14.9	1 .5 3.0	6 3.2 35.3	1 .5 6.3	2 1.1 4.4	14 7.4 7.7	6 3.2 4.5		188 9.6
(CONTINUED)	COLUMN TOTAL	569 29.1	627 32.1	175 9.0	33 1.7	17 .9	16 .8	45 2.3	182 9.3	132 6.8	4 .2	1954 100.0

TABLE IV-50. COMMUNITY PERCEPTION OF BEST SOURCE OF MEDICAL ADVICE
PERCEPCION DE LA COMUNIDAD DEL MEJOR RECURSO PARA CONSEJOS MEDICOS

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-51. COMMUNITY PERCEPTION OF PROMOTER ACTIVITIES
PERCEPCION DE LA COMUNIDAD DE LAS ACTIVIDADES DE LOS PROMOTORES

VAR001 REGION DE SALUD
BY ACTIV (GROUP) ACTIVIDADES DEL PROMOTOR

VAR001	COUNT / COL PCT	ACTIV primeros auxilios first aid 1	curar enfermed. cure disease 2	vender medicinas sell medicines 3	regalar medicinas give free medicines 4	constr. latrinas build latrines 5	instalar agua pot. install pot.water 6	regalar alimentos give out food 7	vacunas vaccinate 8	reuniones comunal. community meetings 10	otro other 11	don't know 12	ROW TOTAL
PIURA-TUMBES	1	162 12.0	53 5.7	43 5.3	50 30.5	5 5.3	5 6.1	8 14.8	12 13.3	41 7.7	21 9.7	2 2.6	199 10.8
SAN MARTIN	2	171 12.6	182 19.5	79 9.8	9 5.5	33 35.1	0 0.0	2 3.7	4 4.4	89 16.7	25 11.5	10 13.0	268 14.6
HUANUCO-PASCO-UCAYAL	3	180 13.3	125 13.4	134 16.6	32 19.5	12 12.8	2 2.4	3 5.6	19 21.1	91 17.1	34 15.7	15 19.5	256 13.9
CALLAO	4	159 11.8	65 7.0	42 5.2	10 6.1	0 0.0	13 15.9	4 7.4	1 1.1	65 12.2	53 24.4	18 23.4	226 12.3
ICA	5	174 12.9	73 7.8	88 10.9	28 17.1	3 3.2	5 6.1	0 0.0	2 2.2	37 6.9	22 10.1	6 7.8	191 10.4
AREQUIPA	6	213 15.7	138 14.8	108 13.4	19 11.6	12 12.8	15 18.3	7 13.0	9 10.0	51 9.6	24 11.1	5 6.5	263 14.3
PUNO	7	168 12.4	156 16.7	140 17.3	5 3.0	25 26.6	30 36.6	3 5.6	39 43.3	108 20.3	28 12.9	9 11.7	238 12.9
ANCASH	8	126 9.3	140 15.0	173 21.4	11 6.7	4 4.3	12 14.6	27 50.0	4 4.4	51 9.6	10 4.6	12 15.6	198 10.8
	COLUMN TOTAL	1353 73.6	932 50.7	807 43.9	164 8.9	94 5.1	82 4.5	54 2.9	90 4.9	533 29.0	217 11.8	77 4.2	1839 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1939 VALID CASES 506 MISSING CASES VARS. 123 through 130, 132 through 134

* * * CROSSTABULATION * * *

TABLE IV-52. SERVICES REQUESTED FROM THE PROMOTER BY COMMUNITY MEMBERS DURING MONTH PRIOR TO SURVEY
SERVICIOS SOLICITADOS DEL PROMOTOR POR MIEMBROS DE LA COMUNIDAD DURANTE EL MES ANTES DE LA ENCUESTA

VAR001 REGION DE SALUD
BY SERV (GROUP) SERVICIOS DEL PROMOMOTOR

VAR001	COUNT / COL PCT	SERV consult. 1	medicines 2	prim.aux. first aid 3	parto childbirth 4	inyección injection 5	planifam. family plan. 6	otro other 7	otro other 8	ROW TOTAL
PIURA-TUMBES	1	36 10.6	26 9.0	25 16.7	3 8.6	28 11.0	1 3.6	2 15.4	6 14.3	94 12.9
SAN MARTIN	2	36 10.8	27 9.4	9 6.0	0 0.0	59 23.1	1 3.6	2 15.4	4 9.5	102 14.0
HUANUCO-PASCO-UCAYAL	3	90 27.0	89 30.6	44 29.3	12 34.3	82 32.2	2 7.1	1 7.7	3 7.1	155 21.3
CALLAO	4	27 8.1	6 2.1	11 7.3	3 8.6	20 7.8	1 3.6	3 23.1	10 23.8	55 7.6
ICA	5	52 15.6	50 17.4	24 16.0	4 11.4	27 10.6	15 53.6	2 15.4	8 19.0	109 15.0
AREQUIPA	6	48 14.4	33 11.5	16 10.7	6 17.1	24 9.4	3 10.7	1 7.7	3 7.1	96 13.2
PUNO	7	22 6.6	22 7.6	6 4.0	1 2.9	9 3.5	2 7.1	1 7.7	6 14.3	43 5.9
ANCASH	8	22 6.6	36 12.5	15 10.0	6 17.1	6 2.4	3 10.7	1 7.7	2 4.8	73 10.0
	COLUMN TOTAL	333 45.8	288 39.6	150 20.6	35 4.8	255 35.1	28 3.9	13 1.8	42 5.8	727 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

727 VALID CASES 1618 MISSING CASES

VARS/ 137 through 144

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-53. COMMUNITY REPORT ON SUBJECT MATTER OF PROMOTERS' HEALTH TALKS
REPORTE DE LA COMUNIDAD EN MATERIA DE LAS CHARLAS EDUCACIONALES DE LOS PROMOTORES

VAR001 REGION DE SALUD
BY CHARLAS (GROUP) CHARLAS DEL PROMOTOR

VAR001	COUNT / COL PCT	aseo pers. pers.hyg. 1	excretas solid waste 2	imp.vacun. imp.vacc. 3	imp.letr. imp.latr. 4	prev.diarr. 5	embarazo prenatal 6	parásitos parasites 7	nutrición nutrition 8	lact.mat. breastfeed. 10	otros other 11	ROW TOTAL
PIURA-TUMBES	1	14 4.2	11 7.9	9 3.8	8 4.6	11 4.7	4 3.3	3 4.1	7 7.8	3 6.8	5 9.8	28 5.0
SAN MARTIN	2	52 15.8	8 5.8	20 8.5	40 23.1	18 7.7	1 0.8	12 16.4	5 5.6	0 0.0	6 11.8	78 14.0
HUANUCO-PASCO-UCAYAL	3	64 19.4	14 12.9	22 9.3	15 8.7	41 17.5	22 18.3	20 27.4	10 11.1	6 13.6	9 17.6	91 16.3
CALLAO	4	29 8.8	8 5.8	37 15.7	8 4.6	44 18.8	8 6.7	6 8.2	8 8.9	6 13.6	15 29.4	69 12.4
ICA	5	16 4.8	13 9.4	15 6.4	8 4.5	27 11.5	14 11.7	4 5.5	2 2.2	11 25.0	6 11.8	54 9.7
AREQUIPA	6	28 8.5	19 13.7	25 10.6	21 12.1	23 9.8	8 6.7	10 13.7	17 18.9	4 9.1	0 0.0	57 10.2
PUNO	7	86 26.1	41 29.5	86 36.4	63 36.4	59 25.2	54 45.0	16 21.9	33 36.7	9 20.5	8 15.7	124 22.3
ANCASH	8	41 12.4	21 15.1	22 9.3	10 5.8	11 4.7	9 7.5	2 2.7	8 8.9	5 11.4	2 3.9	56 10.1
	COLUMN TOTAL	330 59.2	139 25.0	236 42.4	173 31.1	234 42.0	120 21.5	73 13.1	90 16.2	44 7.9	51 9.2	557 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

557 VALID CASES 1788 MISSING CASES

VARS. 111 THROUGH 121

TABLE IV-54. COMMUNITY PERCEPTION OF PROMOTER IMPACT
PERCEPCION DE LA COMUNIDAD DEL IMPACTO DEL PROMOTOR

* * * C R O S S T A B U L A T I O N * * *

VAR001 REGION DE SALUD
BY MEJORAS (GROUP) MEJORAMIENTO DE SALUD POR EL PROMOTOR

VAR001	COUNT / COL PCT	1 mej.salud impr.health	2 agua pot. pot.water	3 letrinas latrines	4 attend.emerg. emergencies	5 aux.inmd. immediate aid	6 vacunas vaccin.	7 menos muerte enf.niños fever child deaths/ill	8 menos diarr. less diarrh.	10 planifam. family planning	11 menos madres fever maternal deaths	12 transf. referral	ROW TOTAL
PIURA-TUMBES	1	152	16	10	70	107	53	35	40	13	14	31	166
		14.0	15.2	6.3	12.4	14.2	19.4	13.1	12.9	12.4	10.6	13.7	14.0
SAN MARTIN	2	141	3	38	60	109	22	24	31	3	10	47	153
		13.0	2.9	23.8	10.6	14.5	8.1	9.0	10.0	2.9	7.6	20.8	12.9
HUANUCO-PASCO-JCAYAL	3	113	5	14	59	73	39	45	47	6	15	30	121
		10.4	4.8	8.8	10.4	9.7	14.3	16.8	15.1	5.7	11.4	13.3	10.2
CALLAO	4	180	1	6	98	88	46	18	54	2	2	14	193
		16.6	1.0	3.8	17.3	11.7	16.8	6.7	17.4	1.9	1.5	6.2	16.3
ICA	5	159	8	7	93	125	27	15	29	47	4	27	175
		14.7	7.6	4.4	16.5	16.6	9.9	5.6	9.3	44.8	3.0	11.9	14.8
AREQUIPA	6	139	21	21	83	111	26	38	42	10	26	33	153
		12.8	20.0	13.1	14.7	14.7	9.5	14.2	13.5	9.5	19.7	14.6	12.9
PUNO	7	118	34	50	65	82	52	67	53	15	56	37	124
		10.9	32.4	31.3	11.5	10.9	19.0	25.0	17.0	14.3	42.4	16.4	10.5
ANCASH	8	81	17	14	37	59	8	26	15	9	5	7	99
		7.5	16.2	8.8	6.5	7.8	2.9	9.7	4.8	8.6	3.8	3.1	8.4
	COLUMN TOTAL	1083	105	160	565	754	273	268	311	105	132	226	1184
		91.5	8.9	13.5	47.7	63.7	23.1	22.6	26.3	8.9	11.1	19.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

VARS. 191 THROUGH 198, 200 THROUGH 204

* * * C R O S S T A B U L A T I O N * * *

TABLE IV-54. (conclusion)

VAR001 REGION DE SALUD
BY MEJORAS (GROUP) MEJORAMIENTO DE SALUD POR EL PROMOTOR

PAGE 2 OF 2

VAR001	COUNT / COL PCT	Tiene medio participa. community community Has medio participatory 13	14	ROW TOTAL
PIURA-TUMBES	1	19	25	166
		15.1	14.5	14.0
SAN MARTIN	2	12	27	153
		9.5	15.6	12.9
HUANUCO-PASCO-JCAYAL	3	34	26	121
		27.0	15.0	10.2
CALLAO	4	5	23	193
		4.0	13.3	16.3
ICA	5	7	12	175
		5.6	6.9	14.8
AREQUIPA	6	13	19	153
		10.3	11.0	12.9
PUNO	7	18	33	124
		14.3	19.1	10.5
ANCASH	8	18	8	99
		14.3	4.6	8.4
	COLUMN TOTAL	126	173	1184
		10.6	14.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1184 VALID CASES 1161 MISSING CASES

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F UY VAR356 PROMOTOR ACTIVO/PASIVO — PAGE 1 OF 1

TABLE IV-55. ACTIVE AND INACTIVE PROMOTERS INTERVIEWED
PROMOTORES ACTIVOS E INACTIVOS ENTREVISTADOS

VAR001	COUNT / ROW PCT / COL PCT	VAR356 ACTIVO (active) 1	PASIVO (inactive) 2	ROW TOTAL
PIURA-TUMBES	1	28	5	33
		84.8	15.2	11.8
		11.6	13.2	
SAN MARTIN	2	33		33
		100.0		11.8
		13.6		
HUANUCO-PASCO-UC	3	30	5	35
		85.7	14.3	12.5
		12.4	13.2	
CALLAO	4	38	2	40
		95.0	5.0	14.3
		15.7	5.3	
ICA	5	27	9	36
		75.0	25.0	12.9
		11.2	23.7	
AREQUIPA	6	25	5	30
		83.3	16.7	10.7
		10.3	13.2	
PUNO	7	32	11	43
		74.4	25.6	15.4
		13.2	28.9	
ANCASH	8	29	1	30
		96.7	3.3	10.7
		12.0	2.6	
	COLUMN TOTAL	242	38	280
		86.4	13.6	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
19.99505	7	0.0056	4.071	6 OF 16 (37.5%)

NUMBER OF MISSING OBSERVATIONS = 4

only a small portion of the basic survey, took only 20 minutes, and was paid at the same rate, and we expected to see much larger numbers of inactive promoters interviewed. Nonetheless, interviewers had trouble finding inactive promoters, largely because they had, for one reason or another, emigrated. It is certainly obvious from the economic analysis above that the income from promoter activities would not be enough to stem any migratory urge.

We feel that it would be spurious to generalize from the numbers of inactive promoters interviewers were able to locate, to some statement about regional dropout rates. We are a little more comfortable with the perspective given by the respondent promoters (N=239), 49% of whom said they knew at least one promoter who was no longer working as such (Var. 364). Highest rates of such acquaintance were in Puno (66%, or 21 of the respondent-promoters, followed in terms of absolute numbers by Arequipa and Callao (Table IV-56). At least part of this discrepancy may be attributed to migratory factors. Puno is a zone of net out-migration, and Arequipa and Calla are foci of massive migratory fluidity. Promoter theories about why the inactive promoters they knew had droppped out were, in descending rank order of importance:

1) Lack of salary (pago) (31.9%)
2) Conflict with own work/lack of time (26.1%)
3) Marriage/travel/family problems (12.6%)
4) Too much work (10.1%)
5) Did not like work (6.7%)
   Being institutionally ignored and lacking necessary materials (6.7%).

If items 1, 2, and 5.5 are combined, we are able to say that at least 65% of the justification for dropout was a combination of economic considerations and lack of institutional support (including salary). As might be expected, most of the attribution of dropout to salary issues surfaced in Puno, but San Martin, Huanuco, and Arequipa also had relatively high percentages of promoters who cited salary and foregone income as the central issue.

Yet the overwhelming majority of promoters (95% of 263) say they like to be promoters (le gusta trabajar como promotor), because they can help people (41%), because the job gives them personal satisfaction (24%), and because it permits them greater communication and more unity with their communities and the opportunity to collaborate with them (14%) (Vars. 357-358).

For the 15 or 20 openly dissatisfied promoters, their reasons were similar to these of dropouts and perhaps predictive of their own future disappearance from the public health scene: 1) lack of salary (30%), 2) takes time away from own work (30%), and 3) lack of community support (15%). The number of cases is very small but, in context, these reasons acquire more weight. Eighty-seven percent of the 238 promoter respondents said they planned to continue working as promoters (Var. 360). Their reasons were similar to the reasons for their satisfaction: 1) they wanted to help their communities (26%), 2) they liked the work (25%), and 3) people needed them (20%) (Var. 361). For the few who planned to quit, a little over 30, their reasons were primarily economic (35%),with a miscellany of reasons for emigration (Var. 362).

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR364 CONOCIMIENTO-PROMOTOR PASIVO ACTIVO

TABLE IV-56. PROMOTER-RESPONDENTS' KNOWLEDGE OF INACTIVE PROMOTERS
CONOCIMIENTO DE LOS PROMOTORES RESPONDIENDO, DE PROMOTORES INACTIVOS

VAR001	COUNT / ROW PCT / COL PCT	VAR364: SI (1)	VAR364: NO (2)	ROW TOTAL
PIURA-TUMBES	1	9 33.3 7.7	18 66.7 14.8	27 11.3
SAN MARTIN	2	10 30.3 8.5	23 69.7 18.9	33 13.8
HUANUCO-PASCO-UC	3	15 51.7 12.8	14 48.3 11.5	29 12.1
CALLAO	4	16 44.4 13.7	20 55.6 16.4	36 15.1
ICA	5	15 55.6 12.8	12 44.4 9.8	27 11.3
AREQUIPA	6	16 61.5 13.7	10 38.5 8.2	26 10.9
PUNO	7	21 65.6 17.9	11 34.4 9.0	32 13.4
ANCASH	8	15 51.7 12.8	14 48.3 11.5	29 12.1
	COLUMN TOTAL	117 49.0	122 51.0	239 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
13.37881	7	0.0634	12.728	NONE

NUMBER OF MISSING OBSERVATIONS - 45

Both active and inactive promoters had similar perceptions about the most important functions of the promoter role, and about the greatest problems both for promoters and their communities. These are presented in comparative fashion in Table IV-57.

Both groups of promoters see their roles similarly -- with the first aid and curative dimensions of highest priority -- and both see their problems similarly. The lack of salary is seen more acutely by larger numbers of dropouts, but it is an issue for many active promoters, and the special activism of Puno does not unduly distort the broader picture.

Finally, there is evidence that some active promoters feel the lack of institutional support that could, even in lieu of salary, foster their effectiveness. However, they do not spontaneously articulate this in order of first priority.

Table IV-57

PERCEPTIONS OF ACTIVE AND INACTIVE PROMOTERS ON THEIR MOST IMPORTANT FUNCTION AND GREATEST PROBLEMS (Vars. 366-369)

	Active Promoters (N=242)	Inactive Promoters (N=38)
A. Promoter's Most Important Function	1. First aid (26%) 2. Cure illness (14%) 3. Give educational talks (13%) 4. Educate community (12%) 5. Prevent illness (12%)	1. First aid (30%) 2. Cure illness (21%) 3. Educate the community (14%) 4. Give educational talks (12%) 5. Handle emergencies (9%)
B. Greatest Promoter Problems	1. Lack of salary (34%) 2. Lack of salary and support, lack of medicines (18%) 3. Lack of support and medicines (16%) 4. Lack of medicines and materials (15%)	1. Lack of salary (61%) 2. Difficult conditions (12%) 3. Lack of medicines (10%)

CHAPTER V. PROMOTER CASE STUDIES

This chapter, and the medical and anthropological case studies on which it is based, are intended to enrich the primarily quantitative data presented in Chapter IV. The case studies were also, as indicated in Chapter II, meant to serve as check on the survey methodology, and vice versa.

The chapter is organized as follows: The first four sections (A, B, C, and D) are reports on case studies carried out by a member of the team with medical and public health credentials, in the Ica, Piura-Tumbes, Cuzco, and Puno health regions. Each report is organized in four standard sub-sections: 1) general background and statistical information; 2) training programs, past and present; 3) site visits to promoters; and 4) general observations. The fifth section, E, is a selection from one of four case studies carried out by anthropologists, in Puno, Huánuco, San Martín and Ancash; only one of these is included here for simple reason of bulk; the others are included as appendices.

There are two major differences between the two groups of case studies. One is disciplinary. The other is use of time. The first group of studies involved a longer period of time in one region, and included a series of relatively brief site visits to a number of promoters, as well as interviews at different levels in the health pyramid. The emphasis was on promoter training, practice of curative medicine, and preventive activity; the perspective was systemic.

The second group of studies involved a longer period of time in a single location and involved a series of in-depth, unstructured interviews with the promoter in situ (see Appendix G for interview guide) and with community members and clients, and rather more lengthy participant observation.

A. Health Region VII: Ica

1. General Background and Available Statistical Information*

The region of Ica has one of the best established systems of health promoters. As of February 1984, there was a total of 833 promoters and 246 trained birth attendants (TBAs) in the health region administered from Ica, and in the past five years, there has been considerable expansion in health resources and personnel in the region. Between 1979 and 1984, the number of Health Centers grew from 13 to 23, and the number of Health Posts from 53 to 96.

Utilization data on promoters is available at the regional statistics office in Ica. Although incomplete and subject to some overcounting, it is possible to get some idea of the general utilization of at least some groups of promoters. The promoter program seems to be most active in Hospital Area #1, the area around Chicha and Pisco in the northern part of the region.

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* Based on information gathered in February 1984.

Data for 1983 for this area are presented in Table V-1, data which are probably incomplete, even for the 174 of the 274 promoters reporting. It is likely that some of the preventive data may be overestimated because promoters tend to group certain functions (for example, a talk on latrines, water and sewage disposal might be calculated as three education sessions). However, the totals are not inconsistent with the experience observed in the field or with the reports filed by the promoters and by auxiliary nurses at the Health Posts and Centers.

For some reason, the Ica data from Hospital Area #1 are better than those from Areas #2 and #3: Area #2's data were not yet in for 1983, and only about 100 of 340 trained promoters had reported. Since Area #2 is the central area around Ica, the lack of full data from this central area suggests a real lack of supervision. Area #3 is in the terrorist-troubled mountains of southern Ayachcho and had submitted no promoter data.

Extrapolating from the data in Table V-1, each promoter in Area #1 would be doing, per month, about: 3.0 home visits, 2.6 education sessions, 2.8 environmental sanitation "functions" (probably inflated), 3.2 "medical" encounters, 2.2 injections, and 0.8 wound dressings (curaciones). This average promoter would also have about seven people using family planning methods and would have referred about seven people per year to higher levels of care. In fact, there really is no "average" promoter, and the range of their individual functions varies greatly, as seen below in the accounts of site visits and as noted in the individual data sheets. Even the activity of a single promoter may vary greatly from month to month,and not all promoters do all the functions listed in Table V-1. It would also be logical to surmise that the 70 promoters in Area #1 who did not report in 1983 probably had even lower utilization rates.

Table V-2 shows the drug utilization reported in 1983 for the 174 promoters reporting in Area #1. Considering that the numbers are individual pills (except for the birth control cycles), the reported utilization of drugs is extremely low; it is however, consistent with the field experience. On a monthly basis, each "average" promoter gave out 0.8 packets of rehydration salts, 3.1 iron pills, 0.9 antispasmodics, 5.7 aspirins, and 2.5 condoms. Again, there is a wide range of drug utilization from one promoter to another, although the average is still very low.

2. Training Programs: Past and Present

Most of the promoters in Health Region VII have been trained since 1981. As of the end of that year, there were 388 trained promoters; by February 1984 there were an estimated 833.

According to one of the Region's nurse-trainers the curriculum designed for use in 1981 has been in use since then; that curriculum is discussed in more detail in Chapter III. In broad terms, it is divided into about 50% preventive and 50% curative training, and, on paper, is designed for 120 hours of instruction, or 3 weeks, although in fact, the basic course was never more than 80 hours or 2 weeks. The de facto reduction of the curriculum from 120 to 80 hours was done proportionally, with no major sections deleted; the curriculum in general

TABLE V-1

Statistics for Promoters in Hospital Area #1 of Ica: Chincha-Pisco-Castrovirreyna

Entire Year 1983

Total Number of Trained Promoters	= 274
Number Reporting	= 174 (63.5%)
Number Not Reporting	= 70 (25.5%)
Number No Longer Functioning	= 30 (11%)

Selected Activities Done by Promoters Reporting in 1983

1.	Total Number of Home Visits		6293
2.	"Family Education" in Diarrhea & Rehydration		2732
	"Family Education" in Nutrition		1549
	"Family Education" in "Parasitology"		1199
	People Treated for Parasites with Drugs		421
3.	Improvement in Environmental Sanitation:		
		Water Sources	1861
		Waste Disposal	1661
		Latrines	2220
4.	Family Planning Programs:		
	End of year:	Patients or Pills	536*
		Patients on Condoms	592
		Patients on Other Means	64
5.	"First Aid" Encounters		6711
6.	Referrals:	Mothers	523
		Children	508
		Others	210
7.	Injections Given		4662
8.	Dressings ("curaciones")		1766
9.	Deliveries		9

*Compared with 314 reported on pills at the end of 1982

TABLE V-2

Statistics for Promoters in Hospital Area #1 of Ica
Chincha-Pisco-Castrovirreyna

Entire Year 1983

174 (63.5%) of 274 Promoters Reporting

Medicines Reported Used*

"Oralyte" and other rehydration salts	1751
Iron	6438
Antiparasiticals	868
Antispasmodics	1918
Aspirin	11818
Oral Contraceptives (cycles)	2034
Condoms	5148

*Actual number of pills or items, except for birth control pills, where the number is the number of cycles distributed

seems to be short on preventive vis-a-vis curative medicine.

Most of the promoters interviewed in Region VII had been trained in 1981 and 1982. However, some of those interviewed had received no training at all, since they had replaced trained promoters who deserted and had not yet been able to attend a training course. While some promoters have received formal retraining, this appears to be highly variable and limited to the most self-motivated promoters within geographic reach of a refresher course.

Refresher courses are given sporadically. The most recent refresher courses in the Ica region were given at three different locations for 44 promoters from 12 to 17 September 1983. The course was 40 hours, 80% devoted to prevention and 20% to giving injections, yet the promoters we spoke to seemed to remember best the 20% devoted to injections.

There are also informal and unplanned opportunities for the promoters to get continuing education. For example, there are sporadic programs on pap smears, family planning, vaccinations, etc., in which promoters participate; promoters may also participate in such activities as nutrition/feeding programs at the Health Post or Health Center.

Region VII has developed a description of the "Functions and Activities of the Health Promoter," mainly oriented toward Maternal/Child Health Care. The regional training curricula are generally consistent with that description but in practice, the training meant to respond to that description is viewed as too brief and re-training too sporadic.

3. Site Visits to the Promoters (N=8)

In Region VII, visits were made, usually in the company of the supervising auxiliary nurse and always in the company of Region VII's chief midwife, to a total of eight promoters in Areas #1 and #2 in that Region. These were:

a. Pachacutec (Area #2, district about 15 Km southeast of Ica.
   - Barrio San Antonio
   - Barrio Los Mendozas
b. Santiago (Area #2, near Ica)
c. Guadalupe (Area #2, near Ica)
d. Palpa (Area #2, about 100 Km. southeast of Ica)
   - Llipata
   - Anexo La Isla (9Km. north of Rio Grande)
e. Pisco (Area #1, beach district)

To appreciate better the supervisory links to the promoters, site visits in Region VII were also made to Health Posts in Pachacutec, Río Grande, Llipata, and San Clemente (near Pisco). The Health Center at Santiago and the local hospital at Palpa were also visited. Finally, we also interviewed an underutilized trained birth attendant at Santiago.

a. Pachacutec: Barrio San Antonio

Cristina A. S., approximately age 50, says she did a two-week promoter training course about 1-1/2 years ago, and a 6-day refresher course in December (actually September) 1983. At the refresher course, she says she learned to give IM and IV injections and to make blood smears for malaria. When she was asked what she currently did, she answered with a memorized textbook speech on the theoretical functions of the health promoter.

She remembered that, about a year ago, she had participated in a "cancer detection" (pap smear) campaign when a physician came through the area. She did not work with a health committee, which was in any case, little active; she had been selected by a mother's committee. As documented by her promoter log and her own recall, her practice of preventive measures has been sporadic and usually in "clusters" of activity, such as a census in 1982. She seems to do about 1-2 home visits a week, usually for curative medicine, although she has apparently talked about hygiene (but not nutrition or well-child care) at these home visits. Like most other promoters we talked with, she was interesed in nutrition only when there was free food to distribute.

A review of her log showed that in the first 40 days of 1984, she had done 38 "curative" consultations. The most frequent diagnosis was diarrhea (11), with other prominent diagnoses being bronchitis, trauma, stomach pain, skin infection, dog bite, and family planning visits. Two wound cares (curaciones) were included. She stated that she had only referred "three to six" patients to a higher level of health care in the past 18 months; specifically, she could remember referring a case of vaginal bleeding.

In fact, Cristina seemed most occupied with curative medicine. When asked what she would most like to do, she replied that she would like to learn to "take blood pressures," since people ask for it. In fact, in her community (which includes about 120 houses), she said that what people wanted was "more medicines, for kidneys, liver, and colic...."

Reviewing her drug supply, it was noted that she had distributed 12 ORS packets in December 1983 and had only two packets left. She did have condoms and birth control pills, for which she charged 100 soles (U.S.$.04) each. She did charge for curaciones and injections, but in fact gave few injections because there was a new pharmacist in the area providing the same service. She also charged for medicines of which she actually had very few. When she needed re-supplies, she got them from the auxiliary nurse at the Health Post or bought them herself at a pharmacy.

b. Pachacutec: Barrio Los Mendozas

The promoter in Los Mendozas is a 25-year-old woman who will likely leave the community soon. Consuelo N. de H. did a two-week training course at the Health Center in Pueblo Nuevo in 1981,

and had done a 72-hour course in first aid and injections since. She was also taking a three-month course at a private school in Ica to become an auxiliary nurse. Her sister is a medical student.

Her log book showed that she was doing about 40 curative encounters a month; the most frequent diagnoses were "headache, stomach ache, and diarrhea." She did dressing changes and gave injections. Her charge for a dressing change was 300 soles, for a month's supply of birth control pills, 150 soles. Although she did not charge for curative encounters per se, every encounter involved the dispensing of some medicine, for which she charged. She got some medicines on a monthly basis from her supervising auxiliary nurse at the health post about two km. away but she bought most of her medicines, for resale to patients, from whatever source seemed best. pharmacies, religious organizations or, in the case of aspirin, the Regional Hospital in Ica. She had ORS packets on hand, but had only used three in the past month.

Obviously, Consuelo is highly self-motivated, so much so that she will soon be looking for a paying job as an auxiliary nurse. When asked what she needed most for her work, she said that she needed "more equipment to give shots." When asked about recent deaths in the community, she only remembered one: a four-day old child who died after leaving the hospital. Consuelo estimated that she spent two hours a day at her job as a promoter.

c. Pachacutec: Supervision and the Health Post

The supervisor of the two promoters above, and of three other promoters in the area, is Luz H., an auxiliary nurse who had an eight-month training course in 1979 and has been at the health post in Pachacutec since 1980. Besides supervising five promoters, she also supervises five trained birth attendants, and performs her own preventive and curative functions. The supervisory nurse is supposed to visit each promoter every two months and submit bimonthly data relating to the promoters' functions. Although Luz aparently actually did the supervision, the majority of supervising nurses elsewhere apparently do not (see the discussion above on the large percentage of promoters for whom no data were submitted in 1983). Luz said she had a six-day course in October 1983 on the supervision of promoters.

Yearly data for 1983 at the Regional statistics office showed that, during 1983, Luz was involved in preventive as well as curative work.* Although the two other promoters interviewed seemed to be more interested in curative medicine and indicated that that was what people wanted of them, Luz's statistics on promoter activities suggested involvement in preventive activities as well (see Table V-3). The summary for the five promoters in the Pachacutec district would indicate that each promoter did about 30 health-related activities each month, exclusive of injections and dressing changes, two-thirds of which might be classified as "preventive."

It was evident that in this district, Health Committees were mostly non-functional, although they existed, and that the more active community force in health was the Mothers' Clubs. Supervision of the promoters seemed much better than average, probably due to the proximity (1-3 km.) of the promoters to the Health Post.

TABLE V-3

Activities of 5 Health Promoters in District of Pachacutec, Ica (pop. 4414), for 2 Months: July-August 1983

		Total	Average/Promoter/Mo.
1.	Home Visits*	67	6.7
2.	Diarrhea/Rehydration Talks*	23	2.3
3.	Nutrition Talks*	29	2.9
4.	Parasitology Talks*	19	1.9
5.	Environmental Sanitation Efforts*	57	5.7
6.	Family Planning Encounters**	22	2.2
7.	First Aid	82	8.2
8.	Referrals	15	1.5
9.	Drugs Dispensed	Range 10-100/promoter	

(Injections & Dressing Changes Not Included in Summary)

*There may be overlapping on these numbers
**There appeared to be more than usual these 2 months

d. Santiago

About one kilometer from the Health Center of Santiago, Eugenia G. M., a woman 22 years old, has served as a health promoter since 1981. She is young, and appeared shy compared with the rather entrepreneurial health promoter in Los Mendozas. Although her work was based theoretically in her home, she seemed to spend more time helping as a volunteer at the Health Center, where she gave injections and helped with "nutrition programs," that is, food distribution. Her preventive medicine "Manuals for Health Promoters," published in Ica in 1983, were neatly covered with plastic and displayed behind the locked glass windows of her medicine box, but they looked pristine and never used.

Eugenia said that she had done a two week training course in 1981, and a one-week refresher course in late 1983. When asked what she like most about being a promoter, she replied she most liked to give injections. Her log revealed that she was doing about 10 injections and 10 dressing changes a month. For the latter she charged 100 soles. She estimated that she used about 10 ORS packets per year, and noted that there were not many cases of diarrhea, since there was a potable water supply in each dwelling, unlike Pachacutec.

Her log indicated that she had been doing about 12 home visits per month; however, these were probably more curative than preventive since there was much duplication of visits, or multiple visits to the same home (e.g., for daily injections or dressing changes). Eugenia had 12 women currently getting family planning devices through her: nine on pills and three using condoms. She charged 50 soles for each packet of pills or each condom.

The log very neatly showed the decline of prevention in Eugenia's work. From the time of her graduation in 1981 until March 1982, the log documents talks given in homes, but none for the past two years. She explained that this was "because people don't have the time; they are working in the fields," and because she said she was "studying and not going out so much." There was no Mothers' Club, and the Health Committee no longer met. Yet, Eugenia insisted that she had been faithfully supervised, or at least visited by her supervisor from the Health Center in Santiago every two months.

Eugenia's total drug distribution in January 1984 consisted of 10 condoms, 9 packages of birth control pills, and 10 aspirin. She also had Lomotil on hand, which she had bought in a pharmacy. She expressed a desire for more medicines, but also expressed an interest in learning more about well-child care. She could recall no child deaths in her neighborhood since she had been the promoter there.

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* The Health Post at Pachacutec in 1983 reported 44 curative visits/month, 30 home visits/month, 56 injections/month, 123 women receiving birth control during the year, and 44 health education talks given during the year, among other activities.

e. Llipata (Palpa)

The auxiliary nurse at Llipata, about 5 km. east of Palpa, has four health promoters to supervise. Raymundo C. H. did a six-month course to become an auxiliary nurse 11 years ago. He was currently unable to spend much time at his health post since his services were needed at the local hospital in Palpa due to a manpower shortage there. He had neatly assembled data on official reporting forms relating to promoter functions. Data for 1983 are shown in Table V-4, for 3 of the 4 promoters; the fourth promoter was not functioning in 1983. 1982 data for the same functions were quite similar. Obviously, the promoters were doing very little, especially in prevention. Although health committees existed in three communities, they were not active. Raymundo said he visited his promoters every two months, and he had the paperwork to prove it, as well as a map on his wall showing the location of the promoters.

With Raymundo, we visited the health promoter in San Antonio. The young woman who had been a promoter there had recently moved away; the new promoter had had no training at all, but was planning to take a refresher course when one was offered.

Her notebook showed no entries at all for the month of January 1984. However, for the last three months of 1983, 28 curative visits were listed for basically three syndromes: colds, toothaches, and headaches. Not one case of diarrhea was noted. Every person was treated exactly the same: under the column for treatment was listed "Aspirin." There were no entries in the log after 18 December 1983; the promoter said no one had come to her since, but it is more likely that she just had not entered the visits in her log book. She went on to say that she had no time to make home visits. Her drug supply did in fact include iron and ORS packets, but she used only aspirin. She did no dressing changes and gave no injections since she did not know how to.

f. Río Grande (Palpa)

Río Grande is about 5 km. west of Palpa. There is a "standard" new health post there with an auxiliary nurse, Antonio H. F. He supervises three promoters (there used to be four), and three trained birth attendants; all of these are along a dirt road that follows the river north of Río Grande along a 25 km. stretch. He said that the promoters were "doing well," that they were known by their communities, and that people had often consulted these people for health advice even before they received their training as promoters. A summary of these promoters' activities for November and December is shown in Table V-5, based on Antonio H. F.'s bimonthly report. It should be noted that this auxiliary nurse supervisor had considerable difficulty in reaching the promoters, since transportation to the communities was very sporadic.

From the summary, it can be seen that each promoter is reporting about 40 health-related activites per month, exclusive of injections. Of these, about 60% of the activities could be interpreted as "preventive," although many of the home visits may, in fact, have

TABLE V-4

Functions of Health Promoters Supervised from
Llipata, Palpa (Ica), Entire Year 1983

	Settlements		
	Pueblo Nuevo	San Antonio	Arenal
Home Visits	5	14	0
Environmental Sanitation Talks	1	--	--
Family Planning	3 pills	3 quit	1 pills
	1 condom		
First Aid	46	120	5
Medicines Distributed	70 Aspirin	300 Aspirin	6 Aspirin
	15 Iron Tabs		
	20 Condoms		
	1 Oral Contr.	18 Oral Contr.	3 Oral Contr.
	8 ORS	6 ORS	1 ORS

TABLE V-5

Summary of Activities of Health Promoters Supervised
From Health Post of Rio Grande (Palpa, Ica)
November-December 1983

	Promoter Community		
	Anexo La Isla	Huaraco	Palmar
Home Visits	10	7	8
Talks on Diarrhea/ Rehydration	4	4	3 + 2 talks on parasites
Talks on Env. Sanitation	7	7	6
"Talks"	3	2	4
Family Planning Visits	14	10	23
Pregnancy Checks	--	3	2 + 1 delivery
Well Baby Care	6	--	4
Post Partum Checks	--	--	3
Sick Child Check	4	4	3
First Aid Encounters	18	17	23
Injections Given	22	7	18
Medicines Distributed:			
Rehydration Salts	8	8	6
Iron	24	24	36
Aspirin	36	26	45
Oral Contraceptives	7	8	20
Condoms	20	24	110
Vaginal Inserts	--	3	8

Antonio H. F. accompanied us to Anexo La Isla, where we made a surprise visit to the health promoter. The other two promoters supervised by Antonio were both men; at Anexo La Isla, the promoter was a woman of about 25 years who had had a two-week training course three years ago, with no courses since then. (It was noted that strikes by health professionals had often caused delays in courses.) Her house was in total disarray, littered with garbage and animals. Her drug cabinet and log books were equally messy. She cleaned out the clutter from the drawer in her wooden standard-issue medicine box (botiquín); although there were several notebooks, she would only show us one, and said that the others had "gotten wet and she had thrown them away." She noted that the health committee was not active.

When asked what she would most like to learn, she replied she would like to know more about drug treatments. She replied that the illnesses she saw most were "diarrhea, measles, and fever." The one log book she showed us documented only injections she had given: in one 12-day period she had given 14 injections of Lincocin or Penicillin which had been prescribed for people of the village by the doctor in Palpa who worked for the agricultural cooperative. In her drug box, she did have rehydration salts, aspirin, iron, and birth control pills. She went to the Health Post in Río Grande for resupply of these items.

g. Camino de Reyes (outside Guadalupe)

With Marina a visit was made to the only health promoter site in the Ica region where the community had actually provided and equipped a location or Health Post building. The site was near Guadelupe, about 8 km. from Ica.

The promoter was a 30-year-old single woman, Maximina T., whose main economic support was still her family. She had done a two-week training course in 1982, and had had no refresher courses yet, although she did have a copy of Donde No Hay Doctor. Until recently, there was another promoter working with her, who left.

Maximina said she was at her Health Post from 8:00 a.m. to noon daily and also functioned from her house about 500 meters down the road. She charged 500 soles for a dressing change at the Health Post, and only 300 soles at her house in the evening; not surprisingly, her figures showed that more people came to her house for dressing changes, so that she was effectively undercutting her own Health Post rates. Her fees had recently changed to keep up with inflation: dressing changes that had cost 100 soles up to December 1983 were now 500 soles at the Health Post, and injections had gone up from 100 to 300 soles at both the Health Post and at home. Maximina also charged 200 soles for medical consultation for older persons at the Health Post, a type of charge not observed at least officially at any other promoter sites we visited. She charged for medicines.

Maximina got her medicines from either the poorly-supplied Health Center in Guadelupe or Socorro Hospital in Ica. She had no birth control pills at present, although 17 women were dependent on her for their supply of pills. It was also noted that there were lapses in the supply of basic medicines, such as birth control pills in other promoter sites. (It is hard to understand how a family planning program

based largely on pills can be effective if pills are not obtainable for even short intervals.) Maximina said she had only one woman using condoms for birth control; she sold three condoms for 100 soles, compared to 100 soles for a month's supply of pills (recently increased from 50 soles). At most other sites, one condom and a month's supply of pills were sold for the same price, although that price varied greatly.

Maximina said that the last health talk she had given had been about two weeks ago, on hygiene in the home, It was accompanied by a film and 16 adults, mostly mothers, attended. Maximina made home visits, with varying frequency, depending on whether some campaign effort was going on, a pattern observed elsewhere. In Maximina's case, there had been a campaign to diagnose intestinal parasites, and she had made about 20 related home visits in December 1983; since then, her log listed only two home visits since the six-week period prior to this site visit.

The logs showed that she saw only two "medical" visits at the Health Post per month, compared to 10 to 12 per month at home, where there was no charge for the visit. She was doing about five to six dressing changes and five to six injections per month at the Health Post, compared to about eight dressing changes and 15 injections per month at home. She had medicines both at the Health Post and at home, and had a stethoscope and a sphygmomanometer to take blood pressures. She had no iron pills at the time; when she did have them, she was giving 10 pills at a time to pregnant women, a homeopathic dose, but probably more than other promoters give.

When asked what she would like to learn about, she said she'd like to know more about curative medications. She was not using oral rehydration salts.

h. Pisco

We stopped at a Health Post about 10 km. north of Pisco, at a place called San Clemente. The auxiliary nurse who supervises the promoters in the area was not there, but we learned some interesting facts related to the promoters and their drug supply. Two of the four promoters supervised from San Clemente had left in 1983; in a log book noting supervisory visits to promoters, the last documented supervisory visit was August 1983 (six months ago). The Health Post (where the promoters should be supplied) had only six packets of ORS; there were no birth control pills or condoms, and we were told that the hospital in Pisco had no birth control pills either.

We did meet a nurse from the Pisco hospital whose job it was to supervise about eight promoters in the urban and peri-urban areas of Pisco. We went to the houses of five promoters scattered around Pisco before we found one at home. The nurse supervisor felt that most of the promoters were doing a worthwhile job, but apparently at least one was not.

Ana María seemed very discouraged with her community; there was no health committee, and people did not collaborate with her. She complained that people wanted her to do dressing changes or wound care free and that "people didn't understand." She asks 500 soles for an injection, but people do not always pay. Since she broke her syringe, she asks people to bring their own disposable syringes when they need an injection.

In reviewing her log book, it was noted that she recorded very few home visits. She said she was supervised every two months, and a report of activities was filled out every two months. The November-December 1983 summmary was interesting in that it documented a suspected practice which could lead to the gross overestimation of the preventive activities performed by promoters in general. She reported 25 home visits, with 25 talks on clean water, 25 talks on latrines, and 25 talks on waste disposal. Obviously, she made home visits at which she talked on the three subjects at the same time; in the summaries of statistics at the regional level, this could be interpreted as 100 preventive activities. The flurry of activity in home visits in November and December must have been inspired by some type of campaign, since a review of her log book showed an average of one home visit per month in the prior months.

Ana María reported 26 women active in family planning in November-December 1983, six "first aid" encounters in the same two months, and no patients referred to other health facilities. She had in her medicine supply: aspirin, iron, vitamins, birth control pills (only two packages), condoms, and vaginal inserts. She had no materials for wound care. She also had a few "emergency" medicines. She stated that she got her medicines from the Pisco hospital and not from pharmacies. Her most regular health activity was family planning.

Ana María and her supervising nurse recounted how another promoter nearby had become "independent." She used to work with the nurse, but stopped sending in reports. She had had a two-week course and worked with the nurse for two years, but then went into "private practice" for her own profit.

i. Summary of a Report on a Supervisory Visit to the Mountain Regions of Hospital Area #2 by a Nurse from Ica, December 1983*

This supervisory visit lasted two-and-one-half weeks and included visits to several promoters in the mountain area of Ica. Marina Y. commented that the nurse was new and had to walk into many of the sites since she did not have a vehicle available. The supervisor reported on eleven sites; the most important of these comments were:

- Chuya: The promoter had been absent for three weeks; the community seemed satisfied generally but complained about his charging too much for birth control pills.
- Abaspata: The community was happy with the promoter, who showed interest in his work. Another promoter could not be found.
- Cocharcas: The promoter had not worked for the past four months because he had had a hernia operation.

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* Informe de Supervisión a los Establecimientos de Salud de las Zonas Rurales (Sierra) del Area Hospitalaria No. 2. Ica. 1984.

- Pampahuasi: The promoter had no aspirin. No comment was made on whether he was doing any preventive work.
- Quilque: This woman promoter had made no home visits in the past three months.
- Huancamayo: The promoter (male) was very active: did first aid and deliveries.
- Anexo de Ticza: The promoter had an empty log.
- Ocoyo: This notebook was also nearly empty, and seen as indicative of very little activity.

4. General Observations Specifically Related to the Health Promoter Program in Region VII (Ica)

Region VII's health promoter program seems fairly well developed, with a basic training curriculum which has been used repeatedly and a supervision schedule which everyone seemed to know, even if it is not always implemented. Most of the promoters were originally trained in 1981-1982; re-training programs have been sporadic and probably inadequate in overall coverage. Some specific observations were:

a. Although the dropout rate was estimated at 10% in 1983 by people at the regional office and by the statistics department, the site visits produced the impression that it probably is higher.

b. As a consequence of dropouts, some people have replaced the original promoters and have had little or no training.

c. Community support seemed poor overall, with only a few exceptions.

d. Community interest seemed more in curative than preventive medicine.

e. Although promoters gave lip service to prevention, they seemed to be more interested in curative medicine.

f. Despite the interest in curative medicine, the promoters in fact were sporadically doing some preventive functions. These seemed to be mostly not self-motivated but related to some campaign or outside impetus. With adequate supervision and direction from their supervisors, the promoters can become effectively involved in preventive programs.

g. A strategy to keep the promoters involved in ongoing, continous preventive programs is needed.

h. Family planning programs have taken root as part of the promoter's functions as an ongoing program, perhaps because family planning is desired by the community and because pills and condoms, etc., have been supplied without cost to the promoters.

i. A sporadic supply of birth control pills and condoms threatens to weaken the family planning program.

j. Oral rehydration salts are used, but infrequently.

k. With regard to curative medicine, the promoters are in fact doing very little that is efficacious, except for wound care and first aid. Analyzing the medicines they use and would like to use, the following conclusions can be made:

- Aspirin is probably used appropriately, but the promoter serves only as a convenience to the community in this respect.
- Iron tablets, when available, are used in sub-therapeutic doses.
- Oral rehydration salts are probably grossly underutilized; the promoters seemed to want to use anti-diarrheals instead, which is inappropriate and can add to morbidity and mortality.
- Specific remedies for specific pathogens are almost never used, except during an occasional campaign. Since laboratory means for identifying pathogens are rarely used or even available, the promoters' treatments remain mostly symptomatic.
- The promoter is usually available to administer the parenteral medicines prescribed by a physician and purchased by the patient; in this respect, the promoter is performing a useful curative service. However, with the exception of antibiotics for a few severe respiratory conditions, the actual value to the patient of these injectables (vis-a-vis oral medication) is doubtful anyway, especially with the small numbers of doses administered.
- The promoter is serving a useful community curative health function with wound care, although many of the solutions preferred by the promoters are an unnecessary expense.
- If the supply of contraceptives is not cut off, the promoter can continue to be an important source of contraceptive information and materials for the community.
- Unless specific diagnoses (and specific treatments) can become available to the promoter, it makes little sense to expand his formulary. Scientific medicine is not really practiced at the Health Posts, and probably not even at most Health Centers, where there are physicians.

l. The statistics on preventive activites are suspect, since there seems to be duplication of numbers which inflate the actual functions done; further, there is no way to quantify what was done (e.g., was 2 minutes or 20 minutes spent with a family on hygiene?).

m. There is a great range in the motivation and functions of promoters; some are utilized considerably, others hardly at all.

n. There is no standard for charging; fee schedules seem haphazard and subject to whim. An interesting observation was that, of the three promoters we visited in the Pachacutec-Santiago area, the promoter who charged the most was most utilized by the community and the one charging the least was least utilized.

o. The drug supply system seemed to depend more on the ingenuity of each individual promoter than on a working logistics system based in the Health Centers and Health Posts. These facilities often were sorely deficient in basic drugs.

p. Except for family planning, very little was being done by promoters in maternal/child health, although the basic training course seems primarily designed for maternal and child health.

B. Health Region I: Piura-Tumbes

1. General Background and Available Statistical Information*

Piura's health promoter program, like all other health programs in Piura, was affected by the heavy rains which destroyed dwellings, Health Posts, and roads in the area in 1983. The current AID-financed program for the training of promoters began in 1980 and the program for training TBAs in 1979, together producing about 110 TBAs and 160 promoters in Piura. It was planned to train more promoters and TBAs in 1983; however, due to the 1983 state of emergency in Piura, only a small percentage of the planned courses were actually held (see below) and no one at the regional office knew exactly how many promoters were actually functioning.

The statistics division in the regional office in Piura did have some statistics relating to promoter utilization, based on monthly reports sent in by the promoters and/or their supervisors; the reports have been less regular recently due to lack of funds for supervision. The monthly reports that were available showed a wide range of utilization and activity not only among different promoters, but from one month to the next by the same promoter. The one activity that was most consistently reported was income from the sale of medicines.

By way of example, a promoter from Chungayo reported for the period 15 August-14 September 1983, a few preventive activities, including 13 patients he helped vaccinate and one "talk," as well as the following "curative"** activities:

	Well	Sick	Wound Care	Injections	Totals
Children under 1 year	10	3	2	6	21
Children 1-14 years	15	1	2	5	23
Patients over 15 years	9	1	4	5	19
					63

However, the next two months showed less utilization: November's "curative" encounters numbered only 24, compared with 63 for August-September; during the latter period, the promoter also reported that he had visited the Health Center once, and that he had been visited once from the Health Center. He also reported the receipt of s/9,345 from the sale of medicines.

* Based on information gathered in February 1984.

** Well-patient care could also be regarded as preventive.

Other promoter reports reviewed at the regional office showed much less activity. At Mossa, for one month, three meetings and no curative encounters were listed, although s/9,000 was reported for the sale of medicines; it is hard to tell whether this was poor reporting or inactivity. Most reports reviewed indicated one or two meetings or talks a month, about 20 "curative" activities per month (half of which were wound care or injections), and sales of medicines between s/5000 and s/9000 per month. There was little documentation of supervision.

Table V-6 shows the reported activities for the first six months of 1983 for promoters; in Sullana, only 10 of an estimated 40 functioning promoters reported. They are listed separately, as comparable data were not available even within the same region. It must be stressed that "average" promoter utilization is probably unusual: there is a wide range of utilization. Some promoters seem very active; others do very little. For example, in the Piura Hospital Area, the actual range for the total number of encounters for the six-month period is from 10 to 468 per promoters. The comparable range in Sullana was from 30 to 507.

The reporting promoters in the Piura Hospital Area seem to have been doing about 14.2 health-related activities per month, compared with 43.5 in Sullana. Perhaps only the more active promoters actually reported from Sullana: the ranges of activities in the two areas are similar. Supervisory visits were probably not recorded properly in the Piura area, although there is no doubt that supervision is generally deficient. Overall, the data indicate that more curative than preventive activity is going on, although in the Piura area 874 of a total of 3148 encounters (or 27.8%) were listed as "well," indicating the inclusion of some preventive efforts within the curative framework.

2. Training Programs: Past and Present

Promoter training programs financed in part by USAID funds began in 1980 in Region I. In all, 10 promoter training programs (not including retraining) were given between 1980 and October 1983, and about 160 promoters trained. The director of training said that, although five basic promoter courses had been programmed for 1983, only two were actually carried out. Both were in September-October (financed by AID project 219): one in Chulucanas trained 19 promoters, the other in La Union trained 16. Nine refresher courses for promoters had also been programmed, but eight of these were not done, not at least with any official funding. As noted below, one promoter refresher course did take place in La Union in 1983.

During 1983, personnel involved with the supervision of promoters received some training. In September 1983, 15 physicians and nurses took part in a five-day course in epidemiology in Canchaque. In October 1983, 71 participants attended a four-day course in accounting and logistics in Piura. And a ten-day course in maternal/child health and family planning was attended by 14 nurses in Sullana. All three courses were funded by AID project 230.

TABLE V-6

Reported Activities of Health Promoters
January-June 1983
Region I--Piura-Tumbes
Piura and Sullana Hospital Areas

Piura
(37 of 65 promoters reporting)

	Total	No. Per Promoter Per Month
Total Encounters	3148	14.2
Well	874	3.9
Sick	807	3.6
Wound Care	456	2.1
Injections	711	3.2
Home Visits	267	1.2
Malaria Samples	30	0.1
Referrals	80	0.4
Community Meetings	74	0.3
"Talks"	67	0.3
"Latrines"	11	0.1
Meetings with Health Personnel	0	--
Visits Received by Health Personnel	0	--

Sullana
(10 of 40 promoters reporting)

	Total	No. Per Promoter Per Month
"First Aid" (curative)	2612	43.5
Malaria Samples	169	2.8
Referrals	66	1.1
Educative Meetings	47	0.8
"Latrines"	3	0.1
Meetings with Health Personnel	27	0.4
Visits from Health Personnel	17	0.3

The original promoter courses were 45 days, but the most recent courses have been 30 days. Up until the most recent course in September-October 1983, in La Unión, a local organization called CIPCA (Centro de Investigación y Promoción del Campesinato), run by Jesuit priests, had collaborated in the design and implementation of promoter training programs with the Ministry of Health.

CIPCA has been especially involved with promoter development in the area of Catacaos, just south of Piura, but their contract with the Ministry of Health is to expire this year. In general, however, coordination between the Ministry of Health and private organizations working with promoters in the area appears to have been poor. When the program in Catacaos began in 1980, only 10 active promoters were identified in the area, although many more had been trained previously by other organizations. By 1984, there were 42 promoters in the Catacaos area. Thirty of these (all except those trained in the September-October 1983 course in La Unión, in which CIPCA had almost no role) have been involved in a tightly-run program of continuing education and supervision. When the CIPCA program is turned over to the Ministry of Health later this year, it is feared that the whole system will collapse.

CIPCA has been arranging "retraining days" for the promoters since 1981. To train the promoters in the Catacaos area, CIPCA gave 2 or 3 retraining sessions of 5 days each in 1981 to the 10 old promoters. These courses were followed by 45-day courses for 10 new promoters each in 1981 and 1982. CIPCA has maintained monthly meetings for the promoters at its headquarters in Catacaos, separate from the Ministry's health center at Catacaos.

The curriculum of the promoter course given at La Unión September-October 1983, will be discussed in more detail later, but it appeared to be almost entirely devoted to preventve medicine. Less that 25% of the course time of about 150 hours could be interpreted (at least on paper) to be "curative" medicine. The course was given by two full-time graduate nurses and all the personnel at the Health Center of La Unión. However, there has apparently been no follow-up or supervision of the 16 graduates of the course since they graduated in October 1983. Also, according to the training director, as of February 1984, no further training courses had been planned due to lack of funds, although CIPCA plans to give (on its own) a 5-day refresher course at Catacaos starting February 27. The nurse who had run the last 30-day promoter training course at La Unión said she would have liked 2 weeks more time for the course, since the promoters needed some "adaptation" time and since she felt they learned slowly: a 2-week course simply was inadequate for promoters starting at "ground zero."

She also felt that monthly follow-up visits to the promoters at their sites should be an integral part of the training, but follow-up had been impossible after the September-October 1983 course because there were no funds for travel, no gasoline, and no transportation.

3. Site Visits to the Promoters

In Region I, due to time constraints and poor road conditions, visits could be made only to promoter sites in the Bajo Piura Hospital Area. Two trips were made to Bajo Piura with the doctor in charge of the development of health programs in rural areas and another trip was made to the Catacaos area and its dependent promoter sites with two CIPCA representatives, including a CIPCA doctor. Nine promoters were interviewed individually, and additional visits were made to the La Unión Health Center, the Bernal Health Post (where staff included a physician), and the CIPCA dispensary at Catacaos.

a. Health Center at La Unión

There are only two health centers in Bajo Piura (La Unión and Catacaos) to cover a population of about 120,000. The staff at La Unión has been active in the training and supervision of health promoters. The staff includes the graduate nurse who was in charge of the last promoter training course and another nurse whose job it is to supervise 22 promoters as well as five Health Posts in the area.

One of the nurses noted that supervision of the promoters had indeed been interrupted by the recent emergency, but that, in any case, there was no real structure to the supervisory system and both administrative and supervisory systems were too centralized at the Hospital Area level. She felt that the promoters should receive some payment for their work, perhaps something like a "tip," since their own income-generating capacity is affected by having to take care of the health needs of their community, although the strongest factor influencing promoters' motivation was pride in their work. The doctor disagreed with the idea of paying promoters, since he felt this would put the promoter in direct competition with auxiliary nurses at Health Posts.

The nurse felt that the promoters should be able to take care of emergencies and treat simple illness. Again the doctor disagreed; he felt most curative medicine should be referred to the formal health system. There was consensus that community people did know who the promoters were and that communities in general wanted promoters to perform more curative than preventive activities. They reported that some of the health committees in the area were active, others not.

The supply system was described as inadequate, "too bureaucratic," and involving too much paperwork. For example, the Health Center at La Unión (where the promoters were supposed to get medicines) had no medicines to give out and had had no rehydration salts in the past two months. La Unión also had no laboratory since the laboratory aide had gone to the Bernal Health Post to work as an auxiliary nurse several months before, so that any laboratory work had to be sent to the hospital in Piura. We heard many complaints that laboratory results never got back out to the field.

Bernardo, one of the newly-trained promoters, had come into La Union to get some medicines for his community, having to pay his own round-trip expenses. He had almost no medicines, and all that they could give him at La Unión's Health Center were a few samples. (Promoters in

general purchase the medicines they think they need wherever they can find them and usually wind up buying medicines at private pharmacies. Their choice of medicines is usualy based on the pharmacist's advice. This is a very expensive way of supplying medicines to rural communities.) Bernardo is a farmer and his regular daily promoter hours were from 8:00 to 9:00 a.m. and 7:00 to 8:00 p.m. He said he had given some health talks but, although somewhat enthusiastic, he seemed frustrated.

The nurse reported that the new class of promoters presently had no books or manuals. Since promoters were suposed to pay for their own manuals, which had to be purchased in bulk at 6000 soles each, and since only five promoters had the money, she was unable to order them. She did have one copy of the Handbook for Health Promoters, which she lent out to someone who needed it to give a talk. At the same time, during the site visits it was observed that about half the promoters did, in fact, have such a manual, almost always look untouched.

The nurse-supervisor from the La Unión Health Center who accompanied us for most of the site visits had written a summary of the activities of health promoters she was supervising. Some of the data presented were partly narrative and obviously incomplete and generalized. Other data presented were a "general consolidation of the activities done by the health promoters installed in 1979 during the entire year of 1983," with monthly figures. Of the six communities listed, two had two promoters each. There was again great variability in activity from month to month, with a general decrease in utilization in the last five months of 1983. Table V-7 summarizes these data.

TABLE V-7

ACTIVITIES REALIZED BY HEALTH PROMOTERS INSTALLED IN 1979
ENTIRE YEAR 1983
SUPERVISED FROM LA UNION, BAJO PIURA
SIX COMMUNITIES: EIGHT PROMOTERS
(COMBINED DATA)

Sick Patients/Common Diseases of Children and Adults	Total	Range Per Community	No. of Encounters Per Community Per Month
1. 0-5 Years Old	514	36-163	7.1
2. 6-14 Years Old	476	45-101	6.6
3. 15+ Years Old	396	31-104	5.5
4. Malaria Samples Taken	274	28-63	3.8
5. Referrals Made	497	44-136	6.9
6. Wound Care/Injections	890*	51-567	12.4
Total	3047	328-1097	42.3

* One promoter alone reported 567 wound care/injections.

These numerical data do not include preventive interventions; these were addressed in a narrative, non-quantitative discussion. The data from this group of promoters show that each promoter was averaging about 40 health activities per month, although for November and December of 1983, the average number of activities was closer to about 20 per month. Promoters were either running out of medicines or the effects of little supervision were leading to decreased utilization. There was some indication that promoters had been helping with immunization campaigns.

b. Llicuar and Bella Vista

At the community of Llicuar, we met the promoter, Carmen C. A., and her immediate supervisor, the auxiliary nurse at the Health Post at Rinconada, who rode up on his own motorcycle. Carmen has graduated from the most recent course in La Unión. She is 24 years old and says she wanted to be a promoter "to help people."

The community at Llicuar had built a room especially for their promoter, but it was really not used much because Carmen had no medicines except for a few ORS packets. The auxiliary noted that there was a serious lack of medicines in general. Carmen said that on Mondays and Tuesdays she helped out at the Health Post in Rinconado and that there was a Health Committee in Llicuar. There was almost nothing written in her log book; she did say that she had had a supervisory visit from the nurse from La Unión every one or two months, but these visits were undocumented. Llicuar has neither latrines nor potable water; Carmen said a few people were boiling their water, but most were not.

Returning from Llicuar to La Unión, we stopped by and visited the health promoter site at Bella Vista. We spoke to the promoter's wife; the promoter was out working. We did review his log and his medicines. The promoter had been trained in 1979; he usually did his promoter work for one hour early in the mornings before going to work. Dust covered all the medications; he did have erythromycin, antidiarrheals, and some vitamins, but no aspirin or ORS. He does give injections. His record of patients attended ends in September 1982 except for one document reporting 36 patient activities in January 1983. Such haphazard reporting reflects either a lack of real supervision, an absence of easily-used reporting formats, little understanding of the potential value of such information in general, or all of the above.

c. Catacaos: CIPCA Dispensary

Dr. Mario M., salaried by CIPCA, is at the Catacaos dispensary to see patients referred by promoters every Tuesday and Friday from 7:30 a.m. to 12:30 p.m. The dispensary is located about one kilometer from the government's Health Center, where there appears to be little interest in the promoters; although the Health Center has a Land Rover, it is apparently not used for supervision.

At the CIPCA dispensary, however, the promoters have a continuing education meeting on the last Monday of every month from 8:00 a.m. to 1:00 p.m. and are given a stipend to cover expenses when they come in for these meetings. In addition, a five-day retraining course for the Catacaos promoters was scheduled to begin February 27,

again under CIPCA. The dispensary also has a large number of medicines for distribution to promoters, as well as a sterilizer for promoter use. CIPCA has provided manuals for the original 30 promoters in the Catacaos program, although not for the 12 recent graduates trained at La Union and theoretically in the Catacaos program. CIPCA has also published its own manuals, with drawings for community talks on malaria control and immunizations, and more literature is planned.

CIPCA promoters are obliged to keep track of all deaths in their communities. Promoters have been used recently in programs to control malaria, which in 1983 had a major resurgence in the Piura area. The malaria control program had to be administered through the Ministry of Health and there were many bureaucratic delays involved with getting it started. Appropriate medicines were very difficult to obtain, notably Primaquin, and results of the smears for malaria done in the field were badly delayed, since the slides had to be sent to the MOH lab in Piura.

d. Alto de Los Carillos

Visits were made to all promoter sites corresponding to the Health Post in Casa Grande, which in turn corresponds to the Health Center in Catacaos. In Alto de Los Carillos, we met the promoter, Rosa H. S., a woman in her 30s who had done a 45-day training course in 1979 which she described as "extremely short." Rosa had completed her secondary education and was doing a correspondence course in nursing because she wanted to learn more and be able to "work in a hospital." She had also completed a course in 1981 for trained birth attendants, but said that people did not know she did deliveries, although they did know she was a promoter. There is some reason to believe that Rosa typifies the case of a promoter or TBA who took courses for the sole or primary purpose of getting the per diem. Similar allegations were made about other promoters in other sites on several occasions; the relevant stipend was also often described as excessive.

The Health Committee had not met for the past five months, but there was also a Mothers' Club to which she gave a talk each month. The town has no latrines, but Rosa says that people generally boiled their drinking water, a custom change for the better since she had been there. She said that her last talk to the community had been about three weeks ago and had been on fever, diarrhea, and hygiene.

Rosa had primaquin for malaria but no aspirin or ORS for distribution; instead, she advised people how to make their own fluids for rehydration (suero casero). Until recently, she had been charging 200 soles for an injection, but now charged 500 soles. The wound care charge was still 200 soles, and first-aid visits and malaria slides were free. Her log was not up to date: the last entries were from September 1983 (five months prior). She did keep up the mortality data, however.

Rosa has a copy of Donde No Hay Doctor, in pristine condition. About two weeks earlier, the supervising nurse from La Unión had come by when Rosa was not home and left a lengthy note which did include some preventive suggestions, but mostly explained how Rosa should do a complete inventory of her materials and medicines, of which five copies were to be submitted to the La Unión Health Center.

e. Alto de la Cruz

At Alto de la Cruz, there was a 22 year-old promoter, Victor I. Z., who had done the course at La Unión five months earlier. He said that since he finished the course, no one had come to supervise him. When the auxiliary nurse from the Health Post at Casa Grande had come to do immunizations, he had not been notified, so did not help. He had no medicines, no health manual, no posters, and no notebook. Although he said he had the equipment for giving injections and charges 300 soles for an injection, no one had yet sought his services, nor had the health committee met for a while. The promoter did not appear to have made much effort in his job, at least to date, nor did there seem to be pressure from the community for him to do so.

f. Chaquira

After missing two promoters in Loma Negra who were working in their fields, we found Consuelo C. in Chaquira. She is in her 20s and recently married. She did an 180-hour course for promoters in 1982, and had had three five-day courses a year since then through CIPCA. Her supervisory ties are with the CIPCA program in Catacaos. Her theoretical supervisor, the MOH auxiliary nurse in Casa Grande (about 2 km. away), does not come to supervise her.

She has a special "office" provided for her by the community which she used for her promoter work, but she also worked out of her home. The Health Committee had last met only three weeks ago, but there seemed to be little community interest in preventive measures. Consuelo said she did not give health talks and only rarely made home visits. Her mortality data revealed that eleven people in the community (of about 200 houses) had died in the past 13 months. The last three deaths had been three children 6 to 12 months old, all of whom had died of diarrheal illnesses; yet there were no latrines nor demand for them in the community and people rarely boiled their water. Consuelo said she did use ORS parkets.

She had also helped when an immunization team had come through four weeks earlier, and with the malaria program as well. In Chaquira, 80% of the malaria slides had been positive. Her log book for injections revealed that she had given 27 injections in January 1984, but a special circumstance was involved: she had two patients receiving streptomycin shots for tuberculosis.

g. Santo Domingo

The promoter in Santo Domingo is Edmundo B.; he is 43 years old and has three children. He had done a 240-hour training course in 1978, but had had no retraining courses since then. His supervision is supposed to come from the Health Post at Bernal, but he said he is rarely supervised, and could not remember the last time.

However, he did collaborate with the immunization team from Bernal that had last come only a week ago. He also said he went to the Health Post at Bernal twice a week, although he got no training there. A Health Committee exists in Santo Domingo, but it has not met

for 10 months. Edmundo was active in a children's milk distribution program in Santo Domingo: USAID milk is stored at his house and he supervises its distribution on a daily basis to 44 mothers with 104 children under six years. There was, however, no Mothers' Club.

Edmundo said he did home visits but gave no talks. He said there were no latrines in the community; he had tried to encourage the building of latrines, but had found no interest. He did say that people boiled their water, but there was a lot of diarrhea and he had no ORS packets. When asked what he did for children with diarrhea, he replied that he sends them to the Health Post. He also refers pregnant women to the Health Post for pre-natal care and sends people with medical problems at night to the hospital in Piura, since Health Posts and Centers are functional only in the mornings.

When asked if he had any medicines, he replied he had only a small amount left, which he was afraid to use because he feared it had expired. However, when his medicine box was actually examined, he did in fact have aspirin, iron, chlortrimeton, chloroquin, and several other medicines from the government's "Basic Medicines" program; he simply had not used them. He knew how to do wound care, but he had not done any since his materials ran out and had no money to buy new materials, i.e., band-aids, cotton, and disinfectants.

His only notebook was his original 1978 course book; he did not keep track of injections, first-aid visits, or anything else. He did help in the collection of malaria slides, but made the point that he never got back the results from the slides sent to Piura.

h. Santa Clara

At Santa Clara, we missed the promoter, who had gone to Sechura, but we met briefy with the Health Committee. The Committee members said that the promoter, who had been trained in 1981, was working well, gave talks, did home visits, and did first aid. However, there was a lack of materials for wound care and there were very few medicines. There was no aspirin or iron pills; evidently the promoter sold only a few medicines he had bought from pharmacies. He did not charge for injections or wound care. The Committee indicated there were no latrines, but that people were interested in them. They noted that there was no potable water, and, moreover, most people did not boil their water. The committee seemed most interested in getting help to set up a small site for a Health Post; the community was essentially destitute because the last two years' crops had been wiped out.

i. San Cristo

The promoter in San Cristo, an enthusiastic and eloquent 52-year old man, had had his first training in health in the military over 30 years ago. Domingo has been the promoter in San Cristo since 1979. He had a whole sheaf of diplomas to prove how many different health-related courses he had taken. He talked about a one-month course given for old promoters at La Union in June 1983, financed by no one, but attended by about 10 promoters who paid their own way just to get the education, a contrast with the stipends customarily given to promoters taking courses -- 30,000 soles for transportation and 12,800 soles per diem.

Domingo functions from his house, which is nicely set up as a Health Post. Nevertheless, he is very actively campaigning to get a new building for a Health Post (the old one was destroyed in the rains), and, in fact, construction has already begun. He owns some land and his wife works, but he is educating seven children.

His office hours are from 6:00 to 11:00 a.m. and 1:00 to 4:00 p.m., "and all night." He charges 100 soles for injections, 200 soles for wound care and for medications, which he gets from the Health Post in Bernal or from the pharmacy in La Unión. He says he usually has ORS, but ran out three days ago. He also had no iron, but he did have aspirin and a variety of other medicines.

He stated that he was supervised regularly from La Unión and he maintained a notebook to document supervisory visits. There were four entries from 1983 and three from 1982. The last entry was dated 18 December 1983. He also kept logs of his own activities and typed up his monthly reports on his own typewriter. His November 1983 report listed 41 health activities, compared with 33 in October and 27 in September. The breakdown of the November report included:

Total Activities: 41

"People seeking medical attention"	11
Well care	9
Sick care	4
Wound care	2
Injections	2
Home visits	6
Malaria blood samples	1
Referred to Health Post	2
Referred to Health Center	1
Community meetings	2
"Talks"	1

Actually this seems to be an adequate level of activity for a health promoter, but these activites are minimal in the context of the promoter's stated office hours. The average is a little more than one health activity per day.

Evidently there is good coordination with the Health Post in Bernal. The doctor from Bernal supposedly comes to San Cristo about every three weeks, and the day of our visit a health team from Bernal, including the auxiliary nurse, came to the promoter's house in San Cristo to do immunizations.

Prenatal care is done in Bernal, with deliveries mostly handled at the hospital in Piura. Domingo estimated that only 10-20% of the babies were delivered by a midwife in San Cristo. Domingo also has the equipment to take blood pressures; he refers cases of elevated pressure to Bernal.

j. Coronado

The promoter's locale at Coronado is almost surreal. Sixto C. M., 23 years old, operates temporarily out of a loaned site: a room three meters square with a sand floor attached to what looks like a tiny church. Two-thirds of the room is filled with painted wooden statues of saints and heaped-up furniture. Sixto's space consists of two wooden benches and a box for his materials crowded into the remaining third of the windowless room.

Sixto was chosen by the townspeople and did his promoter training in the September-October 1983 course at La Unión. He got one of the highest grades (81.6%) on the final evaluation of the 16 students who took the course, the same as the promoter in Alto de la Cruz (see above) who was doing close to nothing.

Coronado did not yet have a Health Committee. The town had no latrines or potable water, yet Sixto said people were used to boiling their water and there was not much diarrhea. He had originally been given 10 packets of ORS and had only used one in the past four months. He said he worked as a promoter some days, in the fields other days. In the four months he had been active, he had received no supervision from any source. Although immunizations had been done in Coronado, he had had little communication about the campaigns.

He had some aspirin which he had gotten from the health post in Bernal but had almost no other medications and no medication for malaria. Sixto mentioned that he had bought some anti-allergy medicine and some anti-spasmodic drops at a pharmacy in Piura; for information on which medicines to use, he had asked the pharmacist. He charged 400 soles for giving injections and for wound care. In November and December 1983, his log documented 17 encounters: 11 for wound care, one injection, and one case of malaria. In the first six weeks of 1984, he had documented only seven encounters, including three wound cares and two injections.

Sixto was the coordinator in Coronado for the program that distriubted food to children under age six (Comedor Infantil).

k. Bernal Health Post

The Health Post at Bernal is the place from which several promoters are supposed to be supervised and the place to which the same promoters refer patients. Obviously, as noted above, some of these activites occur, others do not. Despite the fact that there is a doctor at Bernal who is paid by Corpiura, patient utilization is low, about 12 patients a day. The most frequent diagnoses noted in the record book were bronchitis, pregnancy, and malaria. Although the auxiliary nurse is trained in laboratory work, all lab work by-passes Bernal and goes to Piura.

We interviewed the recently graduated physician on his feelings about promoters. He felt they should be doing more health promotion than medical care. In fact, he thought promoters should be doing no medical care, but he did acknowledge that communities pressure promoters to do curative medicine.

The Health Post at Bernal is also supposed to be a supply point for its promoters, yet the supply of medicines was inadequate, ORS, aspirin, ampicillin in capsules, chloroquin, and thiabendazole in liquid, but almost nothing else. There were no antidiarrheals, iron tablets, or vitamins. The doctor said that usually he prescribed medicines and the patients went to the private pharmacy in La Union.

There was no documentation of any systematic supervision of the promoters from Bernal, and, as is seen above, the supervision is extremely sporadic to non-existent at the less accessible communities.

4. General Observations Specifically Related to the Health Promoter Program in Region I (Piura-Tumbes)

Although there have been health promoter programs in Region I for many years, there appears to have been very little continuity in those programs; the exception is the CIPCA effort, which is about to be turned over to the Ministry of Health. There appear to be only about 160 promoters in the region, and many of these are almost inactive. In fairness, the disastrous rains in Piura in 1983 did interrupt training schedules and promoter supervision. Some specific observations from the site visits and discussions were:

a. A true epidemiological picture of health status in the rural areas of the region is almost totally lacking. The incidence of diarrheal diseases, for example, appears unknown. Certainly the specific pathogens are unknown, since there are almost no lab facilities in the rural areas and little laboratory capability in Piura. It is alleged that the malaria epidemic in Bajo Piura was not acknowledged by the government until there were over 10,000 cases. Without solid epidemiological statistics, setting promoter program objectives cannot be done intelligently.

b. The logistics system for supplying health manuals, medicines, and materials to promoters is nearly non-functional. The successful promoter must obtain materials and medicines wherever he can, by his own initiative.

c. Data collection for administrative functions related to promoters is not standardized even within the region itself.

d. Some promoters have evidenced enough interest in learning and/or are motivated enough to pay the costs involved in continuing education, without stipends from outside organizations. The numbers are small, nevertheless.

e. The promoter supervision that is done bogs down in bureaucratic details of financial accountability, as opposed to health activities. From the amount of paperwork observed at some sites, it is possible that more time is spent in doing the paperwork than in doing health-related activities. There is also a lack of transportation and/or funds for gasoline to do supervision.

f. Promoters offer potential as the community link for categorical health programs such as supplemental food (including the potential for health nutrition education and monitoring), malaria, and immunizations. Although the promoters are often not integrated into these efforts, there are also frequent examples of their functioning as integral part of such programs.

g. Overall coordination and direction for the promoter programs seems haphazard at best and sparse in general.

h. The impression given is that half the promoters are wearing down, doing very little, and losing interest, while the other half are barely starting up, empty-handed, and with little or no direction. A few individuals (the "survivors") do well because they are highly motivated and succeed in spite of the system.

i. Community support of the promoters and community interest in preventive health programs is highly variable, but generally poor to fair at best.

j. Promoters in this region are not involved in family planning; they refer pregnant patients to the Health Posts, and they do only minimal well-child care. They do participate in sporadic food distribution programs for children, but have had little to do with generating or working with Mothers' Clubs. In summary, they are generally very weak in maternal/child health activities.

k. In curative medicine, promoters are doing very little. They do seem to have a much higher referral rate of patients than, for example, Region VII (Ica). The example of the promoter who said he sent all cases of diarrhea to the health post (without giving them ORS) may indicate that the promoter is in fact doing too little curative medicine. He may also be giving too little preventive care as suggested by referral of all pregnant patients to the Health Post for prenatal care. The net result of such referrals could be less health care for the community, due to patient non-compliance because of the difficulty in getting to the health Post or Health Center.

l. Since promoters either have almost no medicines or are not using the medicines they do have, the net effect for the community of the promoter's medicines is almost nil. The two types of medicines most suited to the true epidemiological needs of the community (ORS and antimalarials) fit the above statement.

m. Outside of helping with specific categorical programs in the communities (e.g., malaria and immunizations), promoters are, in general, little involved in preventive work, due largely to lack of motiviation on the part of the community. The 1983 disaster did mke it imperative for people to think of food and shelter necessities before abstract preventive health concepts. Still, had there been good planning and organization in health, the disaster could have been used to make advances in preventive health measures.

n. There appeared to be many capable and motivated people in Piura working with promoter programs, but the institutional "glue" to tie them together and make the programs truly effective is simply missing.

C. Health Region IX: Cuzco

1. General Background and Available Statistical Information

Several international organizations, not including AID, have been training promoters in the Cuzco region for several years. However, there is general discouragement at the regional level about the promoter

program and a feeling that its net impact has been zero. Neither the regional statistics chief nor the regional training chief knew how many promoters were functioning or what they were doing. This is partly because any primary care activities that might have been reported by promoters has been lumped into overall primary care statistics; partly because, at least as indicated by observations during site visits to localities, no data on promoter functions are being collected or sent in from the local level; and partly because essentially negative attitudes toward promoters which result in "burying" their identity in the "Health Comittee" concept. The only statistical information on promoters that anyone at the regional office could find was in the Boletín Estadístico, 1981, published in 1982. These data are shown in Table V-8, which lists a total of 226 "health promoters who have completed training," and 396 "health committees who have completed training." The best estimate available at the region was that there were between 200 and 300 "functioning" promoters as of February 1984.

TABLE V-8
CUZCO HEALTH REGION
1981

			Hospital Areas		
	Total	Hosp. Regional	Hosp. Lorena	Canchis	Apurimac
Health promoters who have completed training	226	67	81	19	59
Supervisory visits to health promoters and health committees	1102	223	270	341	268
Health committees who have completed training	396	141	62	110	83

Source: Boletín Estadístico, 1981, includes data from 1981 and 1982.

Beyond this, there has been little cooperation among the several foreign donors involved in promoter programs in the region, or between them and the Ministry of Health. The impression is one of great disorganization and little direction. This is at least partially attributable to the negative attitudes referred to above. There is tendency among regional health professionals to view the health promoter as a minimally trained (thereby officially sanctioned) curandero who is in direct competition with the established medical care system. The health workers who are supposed to be directly supervising promoters (the auxiliary nurses or sanitarios) are said to feel the most threatened, and the anecdote is recounted of the community that ejected its sanitario and demanded that he be replaced by the promoter. What goes beyond anecdote

is the outspokenness of regional physicians who are, in the main, strongly opposed to permitting promoters to do any curative medicine whatsoever.

At the same time, curative medicine is what promoters are most interested in doing and what communities are most interested in having them do. Communities rank preventive health needs well behind food, shelter, and jobs. The lack of health infrastructure (effective Health Posts and Health Centers, supplies, medicines, and logistics systems), combined with what is sometimes frank hostility from the public health establishment, has made the chances of adequate promoter response to either curative or preventive needs at the furthest reach of the system, simply remote.

2. Training Programs: Past and Present

There seems to have been little or no coordination in the planning or execution of courses for promoters in Region IX, but there have been sporadic courses for several years, most initiated and carried out with the aid of foreign organizations. They have been done at the local level, usually at Health Centers, and nearly always with the use of local health personnnel.

Promoter training takes place within courses for "Health Committees," a semantic distinction which effectively hides the identity of the promoters. Between January and August 1983, there were 17 courses given to Health Committees. We attended a six-day course for promoters and trained birth attendants given at the Health Center of Anta February 13 to 18. Another such course was planned for the same site about two months hence, and a similar course was supposed to take place in Abancay from February 20 to 26.

Courses tend to be of about seven days' duration, at least since 1981, and each promoter takes several of them over the years, if he or she is lucky enough or motivated enough to attend. One promoter supervisor expressed the feeling that a 30-day course was impractical because the promoters would "get tired quickly" of learning. If this were really true, one should wonder about the selection and motivation of the promoters. In fact, the selection of promoters in Region IX seems to have been very weak.

There is some controversy over whether the promoter training programs should be funded with stipends and travel expenses for the promoters. Those in favor point out that if there were no stipends, some promoters could not come to the courses, since they are unpaid volunteers and must sacrifice their regular work to be a promoter. Those opposed argue that if there were no stipends, only those promoters who were most highly motivated would come to the courses.

The regional director of training stated a goal of having each of the seven hospital areas in the region set its own training norms; given some variation in health needs among areas, this goal is not altogether unreasonable. However, if some overall parameters are not set at higher levels, the present haphazard pattern of training could become even more so.

3. Site Visits to the Promoters

All the site visits in Region IX were made in the district of Anta, located in Hospital Area II about 30 kilometers west of Cuzco. Five promoters were interviewed individually, and several more were interviewed as a group at the promoter training course at the Health Center in Anta. In addition, two Health Posts (Compone and Zurite) and the above-mentioned Health Center at Anta were visited. On the visits, We were accompanied either by the chief nurse of rural services in Hospital Area II, or by the graduate nurse in Zurite whose job it was to supervise six promoters and six trained birth assistants in the Zurite area. The Anta district was chosen because a promoter training course was being held there February 13-18, and Anta offered the opportunity to observe a training course in progress, one of the mandates of the Scope of Work.

a. Anta

The Health Center at Anta has nine Health Posts relating to it; in turn, about 30 promoters and 30 TBAs are theoretically supervised from the Health Posts. The Health Center does have a physician and the staff has been committed to promoter and TBA training. However, the Center has not been able to provide much support to Health Posts and promoters, since its own supplies, including medicines and ORS, are inadequate. As a result, Health Post nurses go to Cuzco to get restocked. The Anta Center does have a Land Rover which it could use for supervisory visits, but has a monthly allotment of only 15 gallons of gasoline. The laboratory at Anta is poorly equipped, and the only laboratory test that can now be done there is examination of sputum slides for tuberculosis; no blood or urine tests are done. There are family planning services; birth control pills are available, but most of the family planning at Anta is done with IUD's. There are no emergency services

Perhaps the most remarkable aspect of the staff people at the Anta Health Center is their willingness to give courses to promoters and TBAs when they could just as easily avoid the extra work. It was the staff at Anta that was giving the six-day course we came to observe. They had no outside help in the teaching effort except for some audiovisuals from the Ministry of Agriculture. The Instituto del Niño Andino (Dutch-supported) provides the funds for stipends and travel, but the Health Center personnel did all the work, enthusiastically. They stressed prevention, despite student pressure toward the curative side.

The course curriculum is covered in the more expanded section on promoter training. The promoters in general were extremely interested in the course and eager to learn. Most wrote extensive notes and many asked questions with the usual variation one expects in any student body: a few of the the promoters were very vocal, while others appeared not to understand the material. Questioning and note-taking became very active whenever specific drugs and dosages became a topic.

An informal talk with a group of about 12 of the promoters confirmed general findings about the degree of community interest (quite low) and the kind of supervision and logistics support the promoters had (also minimal). The bottom line of the promoters' complaints, however, was the poor economic situation (lack of jobs), and the increasing difficulty of educational opportunities for campesinos.

b. Compone

Located about eight kilometers west of Anta, Compone has a Health Post with an auxiliary nurse, as well as two promoters and three TBAs. The auxiliary nurse is an efficient, neatly-dressed woman about 50 years old who has been there for eight years. She theoretically supervises two promoters who live nearby, one only about 70 meters from the Health Post.

The Post is fairly well supplied with medicines, although there was no aspirin, iron or ORS. There were, however, cough medicines, injectable penicillin, mintezol, liquid iron, vitamins, and anti-spasmodics, most of which the auxiliary nurse bought from the hospital pharmacy in Cuzco. According to the auxiliary nurse, the promoter who lived 70 meters from the Health Post evidently had his own supply of medicines, either bought with community funds or given to him by foreign contributions. Since he was not there when we visited, we did not get a chance to see the promoter or actually observe his drug supply. The nurse noted that she was responsible for supervising this promoter, but that "he didn't fill out his reports."

The nurse's report for the month of January 1984 was reviewed. Of 70 patient visits in January, 41 were diagnosed as colds, 3 bronchitis, 4 infected wounds, 4 abdominal pain, as well as 6 pre-natal visits, 2 well-child visits, and 2 visits for sputum samples for tuberculosis: all in all, a preponderance of curative-type visits. She also reported 6 wound cares and 46 injections. She only had three women on birth control pills, which they had to buy from a pharmacy. She said that there was a Health Committee, but that there was little interest in the community in preventive health, although she did occasionally give talks in both the schools and the community. She also did deliveries, estimated at about 20 a year. She charged 150 soles for a medical visit (mothers and children), 100 soles for an injection, and 250 soles for a dressing change.

c. Zurite

The population covered by the Health Post at Zurite is larger than that covered by Compone (about 8,600 versus 1,040 inhabitants), so that Zurite has a graduate as well as an auxiliary nurse. Together, they supervise six promoters and six TBAs in the area around Zurite. There have been promoters in that area since 1981. I visited two of the surrounding communities and the promoters in those communities, in the company of the graduate nurse, Gregoria D. G.

Gregoria runs an impressive maternal and child health program at Zurite, but the promoters had little to do with the program, other than some limited well-child care. In the log book showing medical visits to Zurite, there were 280 encounters in January 1984 and 228 encounters in the first 16 days of February; many of these were well-child, prenatal, and post-partum visits. In fact, about 25% of the visits in 1984 were "well-child"; 99 children had been enrolled in response. to two factors: (1) free food supplements and (2) radio publicity. It is interesting that Gregoria rated only about 25% of the 99 as "malnourished."

In 1983, 119 pregnant women were followed prenatally at Zurite: close to 50% of the calculated pregnant population, using a district population of 8,646 and a birth rate of 35/1000. Deliveries were done at home. Charge per medical encounter was 150 soles, including mothers and children.

The maternal/child health program at Zurite does nothing with family planning. There are no birth control pills or condoms: women seeking birth control are sent to the Health Center at Anta, about 25 kilometers distant, which stresses IUDs. Gregoria has to travel personally to Cuzco to buy medicines, either at the hospital or at a private pharmacy. She noted that promoters got some of their medicines at the Health Post in Zurite or bought them at pharmacies in Cuzco. At the time of this site visit, the hospital at Cuzco had low supplies of medicines and was at times refusing to sell medicines to the nurses or promoters.

Gregoria said the promoters were using largely herbal remedies, as well as antispasmodics and analgesics, and were doing very little in preventive medicine. They generally gave "talks" only in cases of emergencies; without supervision or some outside impetus, they tended to do nothing. She had summary cards recording the activities of the promoters, but little was entered, since promoter utilization is very low. Reporting forms promoters used to file evidently ran out long ago, and promoters no longer report even when they are at all active. "Health Committees," which are supposed to include the promoter, the midwife, and several community members, do very little. Mothers' Clubs seem to be more active and, in fact, the Mothers' Club in Zurite raised enough money through a fair to purchase a typewriter for the Health Post.

There are two promoters in Zurite. Both of them came over to the Health Post when they noticed the Land Rover parked there. One of them, Ignacio, a man of about 50, had been "trained" in 1981: he attended one day of a seven-day training course. He was supposed to have been in the present six-day course in Anta, but he was not picked up as promised, so he could not get to the course.

Ignacio uses only traditional medicine; although he has received only some informal training in midwifery from Gregoria, he does some deliveries, four in 1984 so far. Since he is in Zurite, Ignacio sends any sick patients to the Health Post, which is open until 5:00 p.m. daily and on Sundays.

The other promoter in Zurite is an elderly man, Mariano, who did half a promoter course in 1983. He, too, uses only herbs and has no medicines.

d. Mayohuylla

This community is about three km. from Zurite and has two promoters who are brothers, one of whom does not know Spanish well and cannot read his manual, although he said he did a 30-day training course in 1981. Gregoria said that the course was really seven days long; since this promoter was well imbibed with spirits in celebration of some holiday when we arrived, the seven-day figure may be closer to

fact. The promoter had a large wooden box with a red cross on it which contained quite a few old medicines, aspirin, methergine, antidiarrheals, and vitamins among them. He had not had any ORS for a long time: in fact, the health post at Zurite had not had any ORS for a year. He said he did no injections but did wound care, for which he charges 100 soles, but for which he currently lacked the materials. He obviously had been given a supply of "basic" medicines about three years ago, which had mostly stayed in a corner gathering dust. He was, however, growing a garden of herbs (not too successfully) for use as traditional medicines.

This promoter was obviously little utilized by the community and was gradually being replaced by his younger brother. The younger brother, who could read and speak Spanish, was at least sporadically attending the monthly meetings held for this group of promoters and seemed much more motivated. A Health Committee exists but "does nothing."

e. Curamba

The community of Curamba, whose promoter is supposed to be supervised from Zurite, is in fact more accessible from Anta. The promoter in Curamba, Mauro A., is a married man about 25 years old who owns a small provisions shop and farms some land. He said there are 89 families in Curamba. Mauro is involved in community work, notably with the construction of an access road and bridge to the community. He has tried to interest the community in a potable water supply, but has not received any support from the people or community president on this issue. He did succeed in getting some latrines built near the school, but the project is not yet finished. There is a Mothers' Club.

Mauro had been trained in 1981; his log book for 1982 was very neat and documented well his activities that year. The log showed that he had been doing 10 to 12 medical encounters per month in 1982 compared to one or two per month in 1983-84. In fact, he had had only two encounters in January 1984, and one in the first 16 days of February. He had also been distributing many more medicines in 1982: his records indicated that in the past six months, he had given out only 13 pills. This was not because he had no medications; his wooden medicine box contained several medicines, including aspirin, mintezol, and thiabendazol. He obviously just had not been using them, although he said he bought his medicines at a pharmacy in Cuzco.

Mauro did not give injections, but he did wound dressings, for which he was supposed to charge 200 or 300 soles, depending on which supervisor he listened to. A supervisor from the Instituto del Niño Andino had come through in January 1984, unbeknownst to Gregoria, and had suggested Mauro raise his charges for wound dressings to 300 soles. Gregoria, his official MOH supervisor, disagreed, saying he should charge 200 soles, since the charge at Health Posts was only 250 soles. The argument was mainly of bureaucratic importance, since Mauro rarely did wound dressings at all, but it does point out the lack of coordination between the Ministry and foreign donor organizations at even this basic level. Moreover, although Gregoria was supposed to

be Mauro's supervisor (and she did seem to know what he was doing), the note she wrote on the subject of fees in his record of supervisory visits was her only entry in the book

4. General Observations Specifically Related to Health Promoter Program in Region IX (Cuzco)

The overall impression of promoter programs in Region IX is one of lack of planning, coordination, and supervision, with resulting anarchy and chaos. With the avowed goal of letting each area within the region set its own norms, the situation could in fact become even worse. Some specific observations are:

a. Many foreign donor agencies have been involved in promoter courses and programs, with very little coordination among themselves or between them and the Ministry of Health.

b. A logistics and supply system either does not exist or is non-functional. Each promoter or provider must fend for himself or herself to get medicines, supplies, equipment and maintenance.

c. There is no overall working plan for promoter use.

d. Courses are largely ad hoc with little coordination of effort or organized plan to assure the most appropriate use of human and other resources.

e. There is no good source of statistical information on just what promoters are doing; promoters in general are not sending in reports.

f. At higher bureaucratic levels in the region, there is an impression of an effort to discredit and impede the health promoter programs. The medical profession in particular sees promoters as ill-trained curanderos with an official stamp of approval acquired through minimal training.

g. Specific statistics related to the promoters have been suppressed by 1) the use of the term "Health Committee," of which the promoter is only a part, and 2) statistics lumping "primary care" activities so that promoter functions cannot be separately evaluated. The result is that the health promoter is effectively stripped of his or her official identity.

h. At the local level, auxiliary nurses and sanitarios tend not to be supportive of promoters, whom they view as competition. This tendency is exacerbated by the possibility that a promoter located at the doorstep of the health post should have his own medicine supply given to him by some foreign donor organization.

i. The promoters themselves, at least the more active ones, display more interest in curative than preventive medicine.

j. Health Committees are generally non-functional.

k. Selection of promoters has not always been done wisely and sometimes on purely political grounds.

l. Supervision of promoters is haphazard, disorganized, and at times even contradictory. Promoters appear almost abandoned by the Ministry of Health and left to sporadic and uncoordinated efforts by the private voluntary organizations.

m. Medically, the impact of the promoters must be almost nil, since they are doing almost no curative medicine and perhaps even less preventive medicine, although some promoters may be more active than the ones interviewed. It should also be pointed out that although the promoters often had some stock of medicines, they were, in fact, not using them.

n. Despite lack of organization, there are still strongly motivated people working in the field who are interested in advancing the promoter concept in order to raise the health status of communities, and who are enthusiastic and energetic. These are most often the graduate nurses, who should therefore be viewed as a potential strong point in the design and focussing of promoter programs.

D. Health Region X: Puno

1. General Background and Available Statistical Information

Peru's first modern health promoters were trained in the Puno region in 1925, and every regional document relating to health promoters refers to this fact with pride. The current program for training health promoters began in the early 1970s, with most of the region's health promoters having been trained between 1976 and 1980 through the efforts of UNICEF and PAHO. Up through April 1984, a total of 711 health promoters had been trained in the region, plus 441 birth attendants. Forty-four of these promoters were trained only recently, since December 1983, in three courses, the first since 1980. A fourth course is programmed for Azangaro to train 15 more.

Exactly how many of the 711 promoters are still functioning has not been determined, but the regional office is trying to come up with a figure. Data from the 667 promoters trained through 1980 indicated that a little under 50% were reporting as of 1982:

Hospital Area	Promoters Trained	Promoters Reporting	%
#1: Puno	193	90	46.6%
#2: Julicaca	130	89	68.5%
#3: Ayaviri	109	64	58.7%
#4: Azangaro	235	70	29.8%
Total	667	313	46.9%

At the date of this report, only data from Hospital Area #3 (Ayaviri) have been completed for 1983; these showed that of 111 promoters trained, 72, or 64.9%, were still functioning.

Probably the most important reason for the high promoter drop-out rate has been the lack of supervision. Everyone interviewed agreed that the supervision since 1981 or 1982 has been entirely

inadequate. Careful and workable plans have been drawn up, documenting just how each level was to be supervised from the level above, with associated budgets for per diems. Conferences, supported with funding from USAID, have been held to train personnel at the higher levels in supervision. But since 1981 or 1982, there has been no money available for per diems or gasoline to do the actual supervision, so almost none has been done. As an example, in the Juli district, where there are 30 promoters, only four supervisory visits to promoters were documented in the entire year 1983. In the Juli district, communities that wanted supervisory visits have had to provide gasoline money.

The nurse in charge of promoter training and supervision in the Puno region until January 1983 stated that supervision had not been done in the region on any regular basis for the past two years; UNICEF aid for supervision ended in mid-1981, and the Ministry of Health's budget has not allowed for supervision since then. As a result, supervisors at the Regional, Area, and District levels have in fact a very poor idea of what the promoters are actually doing in the field. Logistic support for promoters has been equally poor since 1982: promoters must find and buy their own supplies and medicines. Even the Health Posts, staffed by auxiliary nurses and sometimes physicians, are not supplied regularly and sorely lack medical supplies and drugs.

Health resources in the Puno region are inadequate for its large population (935,000 in 1983); theoretically, health promoters should increase the population's access to care. There are four General Base Hospitals corresponding to the four (recently changed to five) hospital areas, four local hospitals, 22 Health Centers, and 129 Health Posts. In November 1983, there were 74 physicians in the region, a physician:population ratio of 1:12,635. 1983 estimated health status indicators show that, despite the training of promoters and TBAs, little progress has been made since the mid-1970s. In 1983, the infant mortality rate was estimated at 127/1000, maternal mortality at 66.3/1000, and the caloric intake was 24.6% deficient. It was estimated that about 95% of the rural population (70% of the region) lacked basic sanitary services. The major causes of mortality and morbidity remained infectious diseases.

Although promoters are trained to give access to care to rural populations, just having a trained promoter living in the community has not really satisfied the need. Regional plans imply that 65% of the population has access to care, yet utilization data for the promoters show that a much lower percentage of the population is actually getting such care.

In 1981, 79,400 promoter encounters were reported for the entire Puno region. These were reported by 421 of the 667 promoters who had been trained. The data indicated that each person attended by a promoter had 1.7 encounters during 1981; extrapolating from this figure, promoters would have attended a total of 46,700 different people in 1981, or about 7.4%* of the rural population of 70% (900,000)= 630,000. However, in 1983 all the promoters in the region reported

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* A similar calculation for the formal health system indicates a coverage of less than 10% in 1983.

only 62,346 encounters, down 21.5% from 1981. Taken overall, these data would indicate that each promoter was doing about 15 health encounters of any kind per month, or about one every other day.

The percentage of encounters that could be considered as "preventive" is still smaller. The 1981 summary for all promoter activities in the region show only 2,974 health promotion activities (.6 per month per promoter), 1,250 health education talks (one every four months per promoter), and 469 pregnant women "educated." Data from 1983 show a similar pattern.

Tables V-9 through V-11 present utilization data for promoters for the entire Puno hospital area (1983), the district of Acora (1983), and four communities dependent on the Ayaviri hospital (1983-84). Table V-9 summarizes all reported health promoter activities for the entire year 1983 for 98 health promoters reporting (out of a total of 148 listed) in Hospital Area #1 (Puno), which has a population of about 400,000. The average number of encounters per month per promoter was 22.2, of which wound care (curaciones) and injections comprised 51.4%. A medicine was given out in 17.1% of the encounters, or less than four times a month on the average for each promoter. Only about seven health talks a year per promoter were reported and each promoter averaged 1.3 patient referrals per month to a Health Post or Health Center.

The actual number of promoter-patient encounters was probably higher, due to underreporting, mostly monthly reports not submitted or not received. However, as will be discussed in more detail below, there is an element of overreporting involved as well, as one promoter-patient encounter may generate several reported activities. Still, the kinds of activities performed by promoters can be analyzed from these data with some confidence.

Table V-10 presents 1983 utilization data for promoters in a portion of the Puno Hospital Area, the district of Acora. A total of 3,606 promoter encounters were reported in Acora in 1983, with 15 of 19 promoters reporting. The data are very similar to those for the Hospital Area as a whole, with each promoter reporting an average of 20.0 activites per month. Over 60% of these were wound care and injections; preventive activities were minimal. Each promoter averaged about one patient referral every other month, and gave out medicines to less than three patients a month.

Another pattern emerges when Tables V-9 through V-11 are analyzed horizontally. Although the emphasis in training promoters was supposedly in maternal/child health, Tables V-9 through V-11 show that, respectively, 64.1%, 79.6%, and 71.3% of the activities performed were neither for children nor pregnant women.

Field visits to the promoter sites corroborated these utilization patterns; the findings of the visits are presented below in more detail.

The information system for collecting data related to promoter functions is very well developed in Region X. Although promoter data do not seem to flow through the Health Posts, the supervising nurses at the Health Centers seem to have a well-organized system for collecting promoter utilization data. Unfortunately, the supervisors have rarely been able to go out and observe the promoters in action over the past

TABLE V-9

Promoter Activities in Region X: Puno
Hospital Area #1: Puno [1]

Entire Year 1983

	Children	Pregnant Women	Adults	Total	encounters per promoter per month1	% of promoter activity
TOTAL	7655	1704	16740	26099	22.2	100%
Given Meds	1278	218	2972	4468	3.8	17.1%
Wound Care	2218	152	5429	7799	6.6	29.9%
Injections	867	101	4654	5622	4.8	21.5%
Weight/Ht.	2276	376	843	3455	2.9	13.2%
Deliveries	-	368	-	368	0.3	1.4%
Home Visits	915	468	2515	3898	3.3	14.9%
Others				489	0.4	1.9%
Talks Given				657	0.6	-
Pregnant Women "Educated"				512	0.4	-
Referrals				1540	1.3	-

[1] Based on 98 of 148 listed promoters reporting during 1983, and based on their reporting 12 months' activities.

TABLE V-10

Promoter Activities Reported in the District of Acora Hospital Area #1: Puno[1]

Entire Year 1983

	Children	Pregnant Women	Adults	Total	activities per promoter per month[2]
TOTAL	674	62	2870	3606	20.0
Given Meds	135	4	351	490	2.7
Wound Care	298	6	849	1103	6.1
Injections	68	-	1011	1079	6.0
Weight/Ht.	134	5	202	341	1.9
Deliveries	-	34	-	34	0.2
Home Visits	77	4	334	415	2.3
Others	12	9	123	144	0.8
Talks Given				73	0.4
Patients Referred				96	0.5
Pregnant Women "Educated"				108	0.6

[1] 15 of 19 listed promoters reporting.

[2] Based on 15 promoters reporting 12 months per year.

TABLE V-11

Promoter Activities in Ayaviri District[1]
Hospital Area #3 (Ayaviri) of Region X: Puno

December 1983 - February 1984

	Children	Pregnant Women	Adults	Total	activities per promoter per month
TOTAL	23	8	77	108	13.5
Given Meds	4	2	22	28	3.5
Wound Care	7	-	11	18	2.3
Injections	-	-	12	12	1.5
Weight/Ht.	8	1	-	9	1.1
Deliveries	-	1	1	2	0.3
Home Visits	4	4	7	15	1.9
Others	-	-	24	24	3.0
Talks Given				4	0.5
Patients Referred				3	0.4

[1] These figures are for four promoters, all supervised from the hospital in Ayaviri. Each promoter's data covers a two month period.

two years, so that they cannot assess the validity of promoter reporting. Consistent data are collected from one district to another within the region (unlike other regions), but no financial data or data related to specific medications dispensed are reported. Considerable effort is being expended at the District, Area, and Regional levels in the collection and compilation of data related to the promoters, but there has been little serious analysis of these data.

2. Training Programs: Past and Present

The current promoters in Region X were mostly trained between the mid 1970s and 1980, largely through the efforts of UNICEF and PAHO. As described above, 667 promoters had been trained in the region through 1980; after 1980, no new promoters were trained until December 1983, when a new group of 14 promoters was trained in Juliaca with funds from USAID. Two other USAID-funded training courses for new promoters were taking place in Ayaviri (10 students) and Acora (18 students) in March-April 1984. Both of these courses were observed by this consultant. Another course to train 15 new promoters is planned for the near future in Azangaro.

The current promoter training programs in Region X began in the Juli and Ayaviri areas in the early 1970's under Dr. Carlos Cornejo and the Maternal and Child Health program of the Ministry of Health (MOH). In 1976, a three-way agreement between the MOH, PAHO, and UNICEF was made to direct the health promoter program. This lasted until 1981. The first promoter training programs lasted 60 days, but this was soon modified to two periods of 30 days separated by a hiatus of 30 days. In 1981 the time for the basic promoter training course was finally limited to 30 days, where it has remained. UNICEF supplied a bicycle, a medical bag for home visits, and medical equipment for each trained promoter until 1981, when it withdrew from the program. (For a complete list, see Section E.).

The retraining of promoters through refresher courses had been done regularly, but has become much less frequent over the past two years with the cut in funds available for supervisory and logistic support. The 46 (then) promoters in the Juli/Pomata area last had a three-day refresher course in January 1983 (with UNICEF funding), although the same promoters did assemble for an annual meeting in January 1984. More recently, USAID has provided funding for promoter refresher courses throughout the region. These courses had not begun yet, but one was to be given at the end of March 1984 in Acora for 18 promoters. The USAID funds were to be used to give four eight-day refresher courses to 86 promoters, but the regional director of training said that plan has been modified so as to give shorter courses to a larger number of promoters, based on the theory that retraining only 86 out of a total of approximately 400 functioning promoters was inadequate. Nevertheless, there was still some uncertainty as to whether the course would actually begin. The course director (the supervising nurse at Acora) did not know if funds to pay transportation and per diems for promoters were actually available, although the per diems for promoters doing the retraining and the 30-day basic courses being conducted in Acora and Ayaviri were only 2,600 soles. This figure was based on the

value of the sol in February 1983 and had not been increased, despite Peru's 125% annual (1983) inflation rate; the USAID budget had provided for 10% inflation.* Similarly, the travel expense of 3,000 soles for each promoter had not been increased to reflect reality: a per diem of 2600 soles for the promoters was totally inadequate in March 1984.

A curriculum for training of promoters has been developed for the Puno region. This curriculum, which consists of three units, is divided into community development, basic sanitation, and medical attention. Although promoter training courses are supposed to follow the basic curriculum, each course nonetheless seems to be individually developed in accordance with perceived needs and available teaching resources. Acutal course content seems to be very much an ad hoc matter. Commentary on the courses that were actually observed appears in Chapter III.B.

3. Site Visits to the Promoters and Health Posts

Most of the site visits were made to promoters and health facilities in Hospital Area #1 (Puno), which had just been split into two hospital areas: #1 (Puno) and #5 (Chucuito). The sites visited in these areas were all to the south of Puno, mostly along Lake Titicaca or slightly west of the lake. The local hospitals in Ilave and Juli (from where the promoters are supervised) were visited, along with the Health Center at Acora, and Health Posts at Pilcuyo, Molina, and Laraquera. In Hospital Area #3 (Ayaviri), 140 km. north of Puno, the hospital and a promoter site were also visited. In the three hospital areas, a total of six working promoters were interviewed; in addition, in a few communities where the promoter could not be found, community members were interviewed. With the exception of Ayaviri, the supervising nurse went along for the site visits.

a. Acora

The Acora Health Center was visited primarily because 18 new health promoters were being trained there in a 30-day course. There is a large staff at Acora, but their utilization seems quite low. At 10:30 a.m., theoretically the busiest time, since medical attention is given almost only in the mornings, there were very few patients. The Center has experienced frequent staff changes (a finding at all levels of the health establishment) which have affected its programs. There is no electricity, the lab work is minimal, and medicines are inadequate. The family planning program has seen its activity drop by about 70% since the midwife who knew how to insert IUDs left last year.

Sra. Eulalia is the nurse at Acora who is responsible for supervising promoters in the district of Acora, as well as the

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* This is a more or less standard inflator used in AID projects. It would have been impossible for the initial project to foresee (never mind include) a 125% per annum inflation rate.

TBAs and the auxiliary nurses and sanitarios at the Health Posts. She is also responsible for organizing and running the five-day refresher course planned for the end of March in Acora for 18 promoters. There are 28 promoters and 10 Health Posts dependent on the Health Center in Acora. Sra. Eulalia insisted that she was supervising each promoter every three months and had visited all 28 promoters. She said that, although the auxiliary nurses at the Health Posts were programmed in the overall supervisory plan to do promoter supervisi ., they did not do so in fact; moreover, in about half the cases, there existed competition between the promoters and the auxiliary nurses. Examination of Health Post utilization data indicated that, indeed, several of the auxiliary nurses were doing very little work; it makes sense, then, for a promoter to complain that he is not receiving any salary when he sees a salaried auxiliary nurse or sanitario doing less work than he is.

Monthly data from January and February 1984 were reviewed for the Health Posts and the promoters. Health Post utilization varies widely, with activity peaks coinciding with vaccination campaigns. In Plateria, a town five km. north of Acora on the main road, the auxiliary nurse reported only eight patient encounters in February 1984: three wound dressings for the same patient, four weights and heights for newborns, and one injection for an adult. Yet the same nurse reported eight deaths in December 1983, including five children, each about one month old, who died of pneumonia or septicemia, and one woman with a retained placenta. Staffing patterns at the Health Posts do not accord with utilization patterns.

The activities carried out by the promoters were reviewed. Reporting was incomplete, and Sra. Eulalia said part of the incomplete reporting was due to a lack of reporting forms. Table V-10 summarizes all the reported activities for promoters in the Acora district in 1983. Data for 1984 indicated that the promoters were doing mostly curative work: over 75% of their activites involved wound care, injections, or dispensing medication. Sra. Eulalia said the promoters could not get their medications from the Health Posts (due to competition) or the Health Centers (which had none), so that they had to buy their own medications from pharmacies. She said the promoters did not use ORS, although ORS was being used at the Health Posts, a pattern of use confirmed by observation. The only family planning done by promoters in the Acora district was occasional free distribution of condoms.

Sra. Eulalia said that all the promoters knew how to give injections, but were primarily giving injections for tuberculosis. She also said that the promoters' medicines were limited to analgesics and antitussives. Promoter supervisors elsewhere related similar information, as did the regional training chief, who said that promoters gave injections only rarely. Perhaps they were stating theory, or perhaps they were not really aware of what promoters were doing. Promoters are, in fact, giving a lot of injections -- and not just for tuberculosis -- and many are using some fairly exotic antibiotics.

It may also be that supervision has been so infrequent that the supervisors have lost touch with promoters. Sra. Eulalia's trimonthly visits to the promoters occur as part of health team activity which includes the medical activity of a doctor. Given lack of funds

for gasoline, it is doubtful that many of the programmed visits by health teams from the Acora Health Center were actually done. In any case, time and team demands limit the ability of supervisors to see what promoters are really doing.

The community of Hucho Esquena, a promoter site about 7 km. south of Acora, was visited. However, the promoter was not there, and his workplace was locked up. The schoolteacher noted that the promoter had no medicines, although he used to have them. He commented that there was an active Mothers' Club in the community, that once a week the midwife came from Acora, and that there was also an active nutrition program (PAMI). We spoke to a woman who stated that she did not use the promoter because she felt he disliked her since she had had an IUD inserted.

b. Ilave

The Ilave rural hospital is a new structure which is well-equipped with material from Holland but which is underutilized (about 21% bed-occupancy rate and 400 physician visits per month in 1983). Srta. Elsa, who is based at the Ilave hospital, is in charge of supervising 21 promoters in the Ilave area. She said that the promoters came into the hospital each month to leave their reports, but that she had not gone out to visit the promoters at their sites for a year since there were no funds for gasoline. Srta. Elsa said that there was a monthly meeting for the promoters. She also stated that there was a lack of medical supplies, medicines, and notebooks for promoters.

The hospital pharmacy, from which the promoters could theoretically get their medicines, had no aspirin and had been out of other analgesics for two months. The only antibiotic the pharmacy had was ampicillin; they had had no IV fluids for eight months. The pharmacy did have ORS, and the pharmacist said she dispensed about 60 packets per month, mostly on a physician's prescription; the promoters did not ask for ORS or apparently use any. The promoters mostly asked for antispasmodics and analgesics.

The supervising nurses at Ilave said that their promoters' work was mostly curative, that the promoters did very little preventive work and gave an average of less than one talk a month. Srta. Elsa had previously worked in Ayaviri and Azangaro; she felt the promoters had more social conscience there and promoters in the Ilave district were more interested in money. There is a promoters' "union" in the Puno region, and in 1983 the most outspoken promoter campaigning in favor of salaries for promoters came from near Ilave; he had even travelled to Lima to plead their cause. Evidently when he got a job elsewhere, the issue quieted down, at least temporarily.

A three-day refresher course for promoters was held in December 1983, and 19 of the promoters attended; this was the only refresher course given in the past year. At that course some medical materials were distributed to the promoters, but none had been distributed in the past 3 months. The resupply of medical materials to the promoters is obviously a sporadic and unpredictable matter.

c. Pilcuyo

Located about 10 km. south of Ilave, the Pilcuyo Health Post had been staffed by an auxiliary nurse, but one week ago a graduate nurse had come as a replacement. There we met a promoter (Bernardo) from a community about an hour away by bicycle, who said that he helped at the Health Post once a week. The promoter accompanied us on our search for promoters in the communities around Pilcuyo.

Bernardo had been a promoter for nine years. He had a work site built by the community, there was a Mothers' Club with 120 members, and there had been intermittent nutrition programs. He stated that he gave talks on family planning and sanitation. When asked which medicines he used, he said that he used only aspirin, cough medicine, and ORS. He said he got the ORS from the Health Post in Pilcuyo; however, when we visited that Post, there was no ORS, and the only other medicines available were a few vials of injectable quinine and digoxin and a few tubes of an ointment that were kept in a non-functioning refrigerator.

When asked what he charged for his services, Bernardo gave the standard reply that we heard nearly everywhere: no charge for curative consultations, and 50 to 100 soles for injections or wound care. These appear to be the rates that promoters were told to charge when they completed their training courses four to nine years ago, and probably bear no relation to current reality.

d. Caña Maquera

We found the promoter in Caña Maquera working in a field not far from his communal Health Post, built by the community eight years ago when he became a promoter. Jesús M. V. had done a 60-day course in Ilave. He is 31 years old, a farmer, with four children. The community he serves has 68 houses and about 450 people, although he said that people also came from other communities to see him. When asked when he had last been supervised, he replied that the auxiliary nurse from Pilcuyo had come only four weeks ago. However, the most recent entry in the "supervision folder" resting prominently on his desk, together with his "daily activity log," was 1978. The latest entries in the log itself were for 1977-78.

Jesús stated that nearly all the houses in the community had latrines, and each house had its own superficial well, but there was considerable diarrhea nevertheless. When asked about ORS, he said he had had some packets but ran out two weeks ago. His kerosene heater for sterilization had broken "a week ago." He gives talks (charlas) to the community when there are general community meetings each month. Although he had not talked in February, on 1/30/84 he had spoken about birth control pills. The general pattern in many promoter communities is for charlas to be given at the monthly general community meetings as a standard part of such meetings, so that they are not specifically gatherings for health. Thus, when the statistics state, for example, that "618 people attended seven talks on health," they should not be read to mean that the community has an overwhelming interest in health issues.

Jesús, although he claimed to have given talks on family planning to the community, thought that only about two women in the community were actually using birth control. The supervising nurses from Ilave knew that many women in the community were in fact using IUDs and other birth control methods that they had obtained in Ilave. It is not clear why this knowledge gap exists; it may be that Jesus is simply out of touch or there be a problem of sexual barriers in this sensitive area.

Jesús remarked that since the community had built his three-room health post seven years ago, there had been no further community support. He did have a bicycle provided by UNICEF four years ago, but there is no budget for replacement parts, so he has had to buy new tires, etc. out of his own resources. He also had other fairly adequate equipment supplied by UNICEF, including two scales and a bag equipped for home visits. He had a stethoscope and a blood pressure cuff which he said he bought himself. The supervising nurse chastised him thoroughly for using these and said he "shouldn't be doing curative medicine but should be referring cases to the Health Post." However, the UNICEF equipment lists in the late 1970s did indeed provide for supply of stethoscopes to promoters.

Jesús is doing curative medicine, although his overall utilization is low. His log book showed an average of only 10 to 12 patients a month. The report submitted 3/19/84, covering a two-month period, documented the following activities:

4 newborn (4 weights done)
4 deliveries
2 pneumonias
2 infected wounds
2 "treatments"
1 each: dizziness, rheumatism, tonsilitis
0 home visits
0 referrals
1 talk given on birth control, with 55 people present (39 men, 16 women).

Various injections and wound care activities were done for a total of 17 patients and some patients got several injections.

Jesús had a quite extensive drug supply, much more than the Pilcuyo Health Post, and a more varied supply of antibiotics than the hospital in Ilava. Included in his drug supply were vitamins in pill and liquid form, Anacin and Maalox that he had been given by a parish nun (and was selling), antidiarrheals, Dristan, and four kinds of antibiotics: sulfa drops, Keflex and dicloxacillin pills, and injectable long-acting penicillin.

With the supervising nurse casting a disapproving eye on his use of antibiotics, the promoter claimed he only administered them "under a doctor's prescription." When asked how he used the more exotic antibiotics, he replied that he used the Keflex (which he had bought at the hospital in Ilave six months ago) for "flu" and the dicloxacillin for "cough." He said that he charged people at cost for the anitbiotics,

or 150 soles per pill. He also said he had more medicines at his home. It must be remembered that Jesus' utilization rates are so low that, despite the fact that he is fairly well supplied with medicines, he does not really use them very often. This suggests that the simple supplying of promoters with medicines does not, in itself, guarantee higher utilization.

When asked about his service charges, Jesús was quite vague. He said he generally did not charge for injections administered at the Health Post, but charged 150 to 200 soles at the patient's home, if the people could afford to pay. He charged 100 soles for a wound care, but "didn't charge for most"; people receiving medical visits were charged only the cost on medicines. He implied that most people in his community were poor, but in fact people are often rather well-to-do in this particular area because of the cocaine trade. When we asked the supervising nurse if the promoters came to Ilave on their bicycles, she replied that they used to come on their motorcycles. She added that the promoter really charged a lot more for his services, but the community pays without complaint for fear of reprisal. The nature of this reprisal was not made clear.

e. Ticona

Ticona is a community about 4 km. from Caña Maquera. We could not locate the health promoter, but we spoke to several community people, including the agricultural and social promoters and the community president. They said the community helped to buy gauze and material for wound care, that there was a Mothers' Club with 120 members, as well as a functioning Health Committee. The community had built a work site for the health promoter, but it was now being used as a dwelling for the schoolmaster, and a new site for the health promoter was planned. The people we talked to said that the promoter had been functioning there for seven or eight years and that they were satisfied with him. The promoter is a farmer who also does small-appliance repair work. The community people confirmed that he gave a talk on health at each community meeting, remembered that he had spoken on the use of herbal medicines, but had no idea what oral rehydration salts were.

It was interesting to hear about promoter fees from the community perspective. They said the promoter charged from 1,000 to 6,000 soles for an injection; one person stated that the charge just for administering the injection, not including the cost of the medicine, was 1,500 soles. The community president said the promoter charged between 1,000 and 3,000 soles to make a home visit, again not including charges for medicines. The accepted charge for an aspirin pill was 150 soles. Yet clearly there were times when the promoter performed his services for no charge.

In his logbook, the Ticona promoter documented 13 patients seen in January 1984 and 16 in February 1984. To these 29 patients he gave 27 injections, 24 wound cares, and 17 medicines. An average of almost one injection per patient seen is extraordinarily high, yet giving injections is not only advantageous financially to the promoter but is perhaps a mode of treatment most valued by the community.

f. Maquercota

We did not find the Maquercota promoter in his community (not far from Ticona), but as we were headed back to Pilcuyo, the community ex-president caught up to us with the promoter on his motorcycle. The promoter had been trained in Juli in a 60-day course in 1976. He is about 30 years old, a farmer with two children. He does not have his own Health Post but uses a small "borrowed" location for his promoter work.

When asked what medicines he had, he replied "nothing." What he does have, he buys from pharmacies. He charges 25 to 50 soles for analgesics and 100 soles for an injection or wound care. The supervising nurse said that she was told he charged 3,000 soles for wound care, but the promoter denied it. He said he had never been given, nor did he now have, any ORS. He said he made many home visits for which he did not charge, and accurately described the major health problems as "diarrhea and cough." He said he never received payment in kind from the community.

The promoter stated that there were latrines in his community, but potable water only at the school; he claimed people were used to boiling their water. He gave talks to the community at general meetings and said he had talked on the use of condoms. He expressed the desire to receive a salary for his work: "It almost doesn't suit us to work all one's life for nothing; with a family, there's no way to support the family members." When he was asked how much time he spent in his work as a promoter, he indicated that he worked a minimum of three hours a day, and "sometimes nearly all day, and at whatever hour." His answer was similar to that of most other promoters. However, if their average reported activities are accurate, most promoters are taking care of about 10 to 20 patients a month; it is hard to believe that this small number of activities can account for three hours a day of work, even including bookwork, which so many promoters do not do.

g. Juli

The director of the rural hospital at Juli (recently appointed the director of the newly created Hospital Area #5) was interviewed regarding health promoters. He said that the promoter belongs to the community, so that the community should take care of any promoter salary, not the government. He spoke of the promoters' union and its salary demands, and related that the Ministry of Health had come to Puno in 1983 and offered a monthly stipend of 30,000 soles. Somehow, the offer had been forgotten, for it never was implemented. He also alluded to the competition between the promoters and the auxiliary nurses in the context of the salary issue.

He complained that promoters had no supervision at all because there was no money for gasoline or daily expenses. He said that neither the promoters nor the auxiliary nurses were doing much preventive medicine. The continuity of any preventive programs in Puno

was further impaired by the fact that most public-health-minded people in Puno got transfered to Arequipa or Lima. He further stated that some promoters were charging exhorbitant fees for services they should not be performing: for example, some promoters had charged as much as 100,000 soles for performing autopsies. He felt that the overall situation with regard to the promoters had gotten much worse in the past two years.

The nurse in Juli in charge of supervising the promoters is Sra. Fidela C. B., who took over the supervisory job in January 1984. There are 46 promoters in her area (30 around Juli and 16 around Pomata). She said that 18 of these reported regularly, 17 "more or less," and 11 were poor about reporting their activities. The last refresher course (three days in June 1983) was sponsored by UNICEF and attended by all 46 promoters. There are no regular meetings for the promoters as a group, but about once a year they do get together; the last general meeting was in January 1984. The promoters usually bring in their own logbooks every one to two months; although auxiliary nurses are theoretically supposed to supervise the promoters in the field, in fact this does not happen.

Promoter utilization data available in Juli was reviewed. 18 of the 30 Juli area promoters had submitted their monthly report for March 1984. Most promoters had reported 15 to 35 health activities for the month, but the data were in some instances greatly inflated. For example, the promoter in Sihuayro reported about 250 encounters for the month: 223 of these were weights and heights of children who were all measured on one day of a nutritional status campaign. In the rest of the 30-day period, he did 12 wound cares, gave 6 injections, and gave out medicine to 9 people.

The promoter in Chococoniri, where a more extensive case report was done as part of this study,* reported 42 encounters for the month ending 3/13/84. He was clearly the most active of the 18 promoters reporting. He reported 25 adult encounters and 15 with children; these included 13 wound cares, 13 home visits, 3 injections, and 6 medicines dispensed. The site visit to this promoter confirmed the impression that one patient visit can account for several health activities being reported. This practice makes promoters seem more active than they actually are.

The promoters in three communities near Chococoniri reported 9, 16, and 37 health activities for the same 30-day period. All promoters reported having given charlas to their communities.

Sra. Fidela echoed the sentiments of the hospital director on the promoters' request for a salary. She, too, felt that they should not receive a salary but should stay a part of the community, as opposed to being salaried MOH employees. However, she added that it was unfair to the promoters that they were obliged to pay their own way into Juli when they came to leave their reports or get materials related to their work. She admitted that often community support for the promoters was not strong; she said that in the past

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* See the next section for an excerpt from that study.

the communities occasionally gave the promoters some goods such as potatoes, but not any more. She noted that she had heard complaints from some communities related to the functioning of the promoters, but she was unable to check out the problems because she had no way of getting out to the promoter sites. She added that often community politics were involved in the selection of the promoters.

A health team used to go out from Juli every two or three months to make the rounds of communities in the area; since the Ministry's budget for gasoline was slashed, the individual community has to come up with the gasoline money if it wants a visit from such a team, so that such teams make few visits. Logistically, promoters are pretty much on their own, although refresher courses are held periodically. The last group of promoters who trained in 1980 do not even have health manuals, although promoters from the earlier groups do.

The Catholic Church in Juli is independently providing for the training and logistic supply of 16 promoters in the Juli area. Seeing a need not being met by the MOH, the Church enrolled 16 of the existing promoters in a program that offers regular continuing education and a chance for a continuing drug supply based on the sale and repurchase of drugs. The emphasis of the Church program seems to be curative medicine, and the drug supply comprises 36 different medicines, including antibiotics. Sra. Fidela felt the promoters should not have antibiotics. She cited the oft-heard phrase, "And what if the patient were allergic?" There was no cooperation between the Church in Juli and the Ministry regarding the promoters; the Church was simply making its continuing education program open to any promoters who wanted to attend.

h. Chucasuyo Ocaje

Located about 10 km. south of Juli on Lake Titicaca, this community has two health promoters, both of whom were interviewed. One of them is Rogelio C., area president of the region's Promoter Association and considered one of the best and most active health promoters. Rogelio is 33 years old, a farmer and fisherman with four children. He said he did a three-month training course (probably 60 days) to become a promoter in 1980, and had done refresher courses every year since.

The community has a working Health Committee; in fact, several of its members were standing around while we interviewed the promoter. There was a Mothers' Club with 81 members and a nutrition program, but the nutrition program was run through the school, not through the health promoter. The community had built a Post for the promoter, and he had been working there for two years, although it was not yet completed. Rogelio noted that the community did not give any other support to the promoter, although they did support the salary of a schoolteacher for a "private" school. He said the community did not even pay him in kind. When queried directly about their lack of financial support for the health promoter, the community members who were listening replied that they were "thinking about it, but hadn't done it yet."

Rogelio stated that the community had latrines but that they still lacked platforms. The only protected well was in the schoolyard, but it was locked up while school was out for fear of damage. He said he gave talks on family planning, but had no pills or condoms, and sent people interested in birth control to the hospital in Juli.

Rogelio said he had not been one of the 16 promoters participating in the Catholic Church's program for promoters, unlike the other promoter in the community. He had wanted to participate, but was not permitted, for reasons that are unclear. He noted that the Church gave medications to its promoters. The other promoter, who was listening, said that the Church's continuing education program was now open to any promoters who wanted to attend.

Rogelio's Health Post was adequately equipped with UNICEF equipment, including adult and infant scales. However, he had very few useful medications. His medication box contained some old vaccine vials, an empty penicillin box, a few aspirin with caffeine, and piperazine (for ascaris). He had no ORS and said he had never had; for diarrhea, he prescribes suero casero. He had nothing for abdominal cramps, and used herbs for colic. He did have a small amount of a "shotgun" ointment (vioform-hydrocortisone), and less than one cc. of neomycin/dexamethasone ophthalmic drops, which he used by putting one drop a day for 3 days in the affected eye. He said he also had some medications at his house.

There is very little supervision, although a health team did come to the community on 2/15/84 to attend patients, give vaccinations, and do health education. Rogelio confirmed that the community paid for two gallons of gasoline so that the team would come.

The promoter's logbooks were examined. Between March and June 1983, he listed 10 to 12 patients per month; in March 1984, only eight patients were recorded. The records between July 1983 and February 1984 were lost, he said. The March 1984 data for Chucasuyo Ccaje available in Juli differed from his logbook, however: 33 encounters were listed (20 adults and 13 children). Of these, 12 were listed as wound care, 11 as home visits, 2 injections, and 6 medicines dispensed. Probably the home visits were not included in his logbook, and multiple encounters were probably recorded during one patient visit if more than one kind of activity was done.

Before we visited Rogelio, we asked the Juli supervising nurse what the promoter was charging in Chucasuyo Ccaje for his services. She said he charged 200 soles for an injection and 300 to 500 soles for wound care. Rogelio himself said he had no fixed prices; he said he charged 100 to 150 soles for wound care and 20 soles for an injection. For medicines, he said he charged his cost or nothing. He said he charged nothing for home visits, but sometimes people gave him "up to 250 soles." Since Rogelio was area president to the Promoters' Union, his position on a salary for the promoters was interesting. He said he was not pushing for salaries for the promoters but rather per diems, and he wanted more community support.

Rogelio's hours as a promoter were every Monday and Thursday from 9:00 to 3:00, and he said he did home deliveries. In

March 1984, he referred two patients to Juli. Obviously his utilization is low, probably considerably less than one patient a day.

The other promoter in Chucasuyo Ocaje, who listened to the interview with Rogelio, is a woman about 30 years old who was carrying an infant on her back. She said she had been working as a promoter for about 10 years. Although she sent reports to the Minsitry of Health, she was also working with the Church group in Juli, did monthly continuing education with them, and was going to do a 15-day refresher course with the Church group in April 1984. She seemed to have many more drugs than Rogelio,,but said she bought the medicines with her own money.

She worked both out of her home and at a location in the school, but a Post was being built for her. She stated that she charged 50 soles for an injection or wound care, and 50 soles per medication if the person could afford to pay. Deliveries were free, but she said some people paid her 200 to 500 soles for doing them. Her family planning activity was limited to giving talks; occasionally a physician from Puno came and inserted IUDs.

i. Molina

The Health Post at Molina, about 12 km. south of Juli, was new and well equipped. Even the refrigerator had been functioning up to that morning; the ice was still frozen. The auxiliary nurse indicated that he worked well with the surrounding promoters and specifically mentioned that he used them to coordinate vaccination campaigns. The last documented supervision was 10/26/83, five months earlier, despite the fact that the Health Post is almost literally on the main road. There were ORS, and the nurse said he used them. He also said he did have available some solutions for wound care to resupply the promoters.

j. Laraquera

Located 39 km. southwest of Puno on the road to Moquegua, the Laraquera area did not yet have any functioning promoters, but had three promoters in training in the Acora course. The two auxiliary nurses assigned at the Laraquera Health Post were interviewed. It was notable that the newer of the two nurses spoke Quechua and not Aymara in this Aymara community. He had previously worked in the Acora area. He was in favor of having promoters in the Laraquera area primarily because of the isolation of the surrounding communities, but he thought that the promoters in the Acora and Puno areas were lazy and did very little. The second auxiliary nurse, who had been in Laraquera longer and who had in fact been interviewing promoters in the Acora area for this project, also felt the promoters were not doing much, or in his word, "nulo" (nothing).

The Health Post had almost no drugs; there were exactly five different medications available: Vioform-HC cream, two injectable antispasmodics, injectable phenobarbital, and Indocin pills. There was a large box of ORS and the nurse did use ORS, although he said he

did not see much diarrhea. The Health Post seemed to have about 80 encounters per month -- really low utilization considering that two auxiliary nurses were assigned there. There was adequate but non-functioning equipment including a broken refrigerator and sterilizer.

Although the Health Post had almost no medications, the older nurse had his own little store 200 meters down the road, where a shelf area 1 X 1.5 meters was neatly stacked with an array of medications for sale; these were mainly analgesics and cough medications and did not include antibiotics. If someone in Laraquera needed antibiotics, he would have to go 39 km. to Puno.

k. Umasuyo Alto (Ayaviri)

Promoters in the Ayaviri area are much more dispersed than those in the Puno and Juli areas, so that their supervision is even less. The promoter in Umasuyo Alto, about 20 km. southeast of Ayaviri, was located working in his fields. He was 46 years old, had 6 children, and had done a course of "over 30 days" in 1978. He said he had only done two 3-day refresher courses since then, the last one in November 1983.

He said he had last been supervised in October 1983, and that was the only time in 1983. He did say that every month or two he went to the hospital in Ayaviri to turn in his monthly reports, but there were no opportunities for continuing education on those visits. When asked what his greatest needs were as a promoter, he replied "medications and financial help." Although he said he had some aspirin he had purchased himself and he had been given some material for wound care at the hospital, he was out of nearly all other medications.

Unfortunately, we were unable to see either what medications he actually did have or his logbook, since he said his wife had gone out with the key to the house. He stated that he gave three to four injections per month and did maybe three to ten wound cares per month. He said he charged 75 soles for an aspirin or an antispasmodic (when he had them), but charged nothing for an injection, although some people "voluntary" paid him up to 500 soles for giving an injection. He further stated that his charge for doing home visits was also voluntary, and some people did pay him 500 or 1000 soles for a home visit.

He indicated that he would like some kind of pay for being a promoter. His answer to how much time he actually spent in his promoter work was somewhat vague: "They can call me anytime and it takes a long time to get there...." There is no doubt that the population is dispersed, and this has often been the reason why male promoters have been greatly favored in the selection process over females. Social reality in the Puno region simply does not allow community leaders (who are all male) to believe that a woman would be capable of handling emergencies at night (although midwives have obviously done it for ages).

The promoter in Umasuyo Alto said he used some herbal medicines and used suero casero for diarrhea; he seemed not to know what ORS were, and said he had none. He said he had a promoter manual and gave a health talk each month at the general community meeting.

There really were no latrines, and no Mothers' Club; there was, however, a Health Committee; its president participated in our interview. The promoter had no Health Post; he used to be in the school, but now operated out of his home.

4. General Observations Specifically Related to the Health Promoter Program in Region X (Puno):

The health promoter program in Region X is one of the oldest and most established programs in Peru. Most of the present promoters were trained between 1976 and 1980, and probably over half of the 667 promoters trained through 1980 remain active, although their utilization, as described above, is generally quite low. With the amount of supervision having been minimal since 1982, and with the lack of logistic support since 1982 as well, the program has suffered greatly in the past two years and has had a decrease in utilization, quality of activities, and probably community support. At present it is a program in decay. Some specific observations are:

a. Supervision of promoters is almost non-existent, primarily due to a lack of budget support for this activity by the Ministry of Health. There are no funds for gasoline or per diems, and given the present economic situation, health workers are unable and unwilling to pay their own way to do supervision.

b. Logistic support, which apparently existed three years ago, is now virtually non-existent. Promoters are mostly on their own to obtain medicines and supplies (with a few sporadic exceptions). The health posts and centers as well as the hospitals do not even have adequate supplies and medicines themselves, so they are unable to supply the promoters.

c. Community support varies a great deal. Community organization actually is fairly well developed in the Puno region; in fact, most communities appear to have provided a site for the promoters. However, the communities have done very little to maintain the promoters. Unless a supervisory and logistic system for the promoters is re-established, it is unlikely that the communities will do much to support their promoters.

d. Promoter activities have been predominantly curative as opposed to preventive, and will continue to be so unless the supervisory system is made to function again. A measure of failure of the promoter program is that, despite this program's having been in place for 4 years or more, there has been no appreciable increase in community awareness of the need for prevention in health, and certainly no demand from the communities for preventive programs.

e. It is unlikely that the promoter program has, to date, had any significant impact on the health status of the rural population in Region X. Over the past 8 years that the present promoter program has existed, there has been little change in rural sanitation, infant or maternal mortality, or the incidence of infectious diseases.

f. The promoters have had almost no involvement in family planning programs, nor have they been involved to any extent in the use of oral rehydration salts.

g. There has been considerable activity in Region X in the training of supervisors, with several conferences held at different levels; however, these training efforts seem both premature and fruitless if there are no funds provided to do the actual supervision.

h. As far as I could tell, there appeared to be no prospects in the immediate future for budgetary support for supervisory or logistical systems, without which the promoter system will continue to deteriorate.

i. Most promoter activites seem to be centered not only in curative medicine, but also primarily in adult medicine as opposed to maternal and child health.

j. The promoters' fees are not only very variable, but at times capricious and even exhorbitant. Many have probably felt that since they have no salary and must support their families, they are entitled to a "living income," so they have naturally gravitated to curative medicine (since preventive medicine pays nothing) and higher fees. The actual fees are very difficult to document, since the promoters were obviously reluctant to say what they actually charged, and the supervisors had not been out in the field enough to know what they were in fact charging.

Probably most of the promoters do a lot of work gratis or for very modest charges, but a few have been charging exhorbitant fees, and generally their communities have been afraid to complain for fear of reprisals. Two extreme examples are a promoter in the Ilave area who charged 20,000 soles for an intravenous injection, and another promoter in the Juli area who was charging up to 100,000 soles to do an autopsy. Table V-12 shows some comparative charges for different activities done by promoters and/or at health facilities in Region X. There is great variance in the promoters' fees. There is also considerable difference in what the promoter said his fees were and what community members or supervising nurses estimated the fees to be.

k. The promoters' drug supply is very haphazard; no standardization exists. Since there is no regular drug distribution system, each promoter fends for himself and buys what he perceives to be important with little direction from supervisors with whom he has little or no contact. Some promoters have almost no drugs at all. Others have a variety of sometimes exotic, expensive, or potentially dangerous medicines which they really do not know how to use properly.

l. The medical impact of the promoters' curative efforts is, in fact, negligible. The potential for using curative medicine to promote preventive measures has in fact been ignored. Specifically:

- The promoters are actually serving only a small part of their target population (probably less than 10%).
- There is no epidemiological basis for the promoters' activities.
- They are practicing "band-aid" medicine without "band-aids."

TABLE V-12

Comparative Charges for Medical Services (in Soles[1])
Region X: Puno

March 1984

	Medical Consult	Wound Care	IM Injection	Home Visit	one Headache Pill
Promoters:					
Chucasuyo Ccaje	0	100-150	20	up to 250	25
Umasuyo Alto	0		up to 500	500-1000	75
Cana Maquera[2]	0	100	150-200		50
Ticona			1000-6000	1500-3000	150
Opinion of Auxiliary Nurses[3]	<-------- 100-2000 --------->				
Opinion of Acora Supervisory Nurse	0	50	100	20-100	
Opinion of Juli Supervisory Nurse	0	300-500	200		
Health Posts, Centers, and Hospitals:					
Laraquera P.S.	300	300	200		25-50
Molina P.S.	300	500	300		
Acora C.S.	800	500	200		
Ilave Hosp.	600	500	300		
Juli Hosp.	500	500	300		

[1] 2500 soles= $1 U.S.

[2] Supervising nurse claims he charges over 1000 soles per consult

[3] From survey of auxiliary nurses done in Region X

- From our observations, the promoters are practicing empirically, undoubtedly with some placebo effect. Using mainly analgesics or inadequate doses of antibiotics, the promoters have no more practical function than a storekeeper selling the same drugs.
- Regarding their impact medically on the most important specific disease entities:
  - Malnutrition: Although they occasionally give talks on family food plots and participate in some food distribution programs, the promoters have in fact only been marginally involved.
  - Diarrheal diseases: With no epidemiological basis for treatment (and few specific drugs), no ORS, and almost no involvement in basic sanitation, the impact has been minimal.
  - Respiratory disease: Although the promoters have helped with vaccination campaigns, the campaigns themselves have been only marginally effective. In treating respiratory diseases with antibiotics, the promoters have chosen inappropriate antibiotics or used them in homeopathic doses. The promoters should be much more actively involved in tuberculosis programs.
  - Referrals: There seems to be great variability in referrals. True emergency referrals involving the promoter seem to be rare, and some other types of referrals surely would be better handled by the promoter if he were trained to handle them (e.g., prenatal care, common diarrheas).
- There is great variability among promoters in their use of injections. This would seem to indicate inappropriate usage and/or the effect of a positive financial incentive to give injections; the community seems to accept a high fee for an injection as opposed to charging for a medical consultation, which would be competing with the established medical system. Table V-13 shows a wide range in the relative frequency of injections given by promoters in five districts of Hospital Area #1. Note that the relative frequency varies from 15.2% in Juli to 54.9% in Yunguyo. This could represent a very active tuberculosis program or an high level of entrepreneurship; the latter appears more likely, as Yunguyo also has the lowest level (by far) of talks given and home visits.

m. Although statistics relating to promoter activities are carefully compiled at the District, Area, and Regional levels, these statistics are deficient because of practices leading to both under- and over-reporting. As mentioned above, often one patient visit to a promoter can generate several activities reported; on the other hand, home visits or several months' activities can go unreported. Also peaks and valleys in promoter activities, such as occur with vaccination or other preventive campaigns, can give misleading statistics. And useful data related to infectious disease, medication used, and fees collected are often not reported.

TABLE V-13
RELATIVE FREQUENCY OF REPORTED HEALTH PROMOTER FUNCTIONS
COMPARISON OF 5 DISTRICTS IN HOSPITAL AREA # 1: PUNO

Entire Year 1983

District:	Total # Activities	% Injection	% Home Visits	Ratio: Talks to Total Act.	Ratio: Referrals/ Total Act.
Acora	3422	31.0%	14.6%	3.1%	4.5%
Ilave	4072	26.5%	16.3%	3.7%	3.2%
Juli	7326	15.2%	14.3%	3.1%	6.4%
Desaguadero	3205	30.1%	17.2%	3.3%	1.8%
Yunguyo	2728	54.9%	3.8%	0.6%	2.1%

n. Many of the older promoters seem to have lost their enthusiasm (of course, many are no longer active). Some have become more interested in earning a living than serving their communities. Region X's promoters have become so established that they have even organized their own union. The promoters in training, however, seem very eager and motivated, although concerned by their perceived lack of support systems. Promoter selection probably continues to suffer from a lack of supervision: one indicator of this is the very low percentage of female promoters. Of the 28 promoters being trained in the Ayaviri and Acora programs, only one was a woman.

o. The region has many people at the supervisory level who are both capable and experienced in promoter programs. However, many of these people have lost touch with the reality of the problems faced by the promoters, likely because they have had very little contact with the promoters in the field in the last two years. Many of the supervisors' ideas are too rigid, especially with regard to what promoters should and should not be doing. Their ideas are often conservative and categorical, (promoters should not be doing any family planning except talks or should not be prescribing any antibiotics). Given the reality of a very disperse population and the difficulty of access to the formal health system, such categorical positions need to be modified if the promoter program is to be successful.

p. The support system for the promoters is not well integrated. There is as much competition as there is cooperation between the promoters and the auxiliary nurses. The people who are supposed to be supervising the promoters change often; the higher the position, the more frequent the changes. Keeping qualified supervisory personnel in the field has become even more difficult since the recent changes in the remuneration of health personnel which favor urban health workers.

q. Very elaborate plans exist in Region X for promoter training, supervision, and utilization goals. Even an impressive amount of equipment is in place throughout the health system (including the promoters). But the small details that make a system work have been completely ignored. The supply system for drugs and materials, which functioned three years ago, has ground to a halt; there is no gasoline for supervision, no bulbs for projectors, no forms for reports, no parts for refrigerators or bicycles, etc. No doubt Peru's general economic situation has much to do with the present situation, but if the present situation with regard to the promoter program continues as it is, it is likely that the program will collapse entirely.

E. ANTHROPOLOGICAL CASE STUDY OF A HEALTH PROMOTER IN CHOCOCONIRI, DEPARTMENT OF PUNO

1. Introduction

The field observations of promoter activities described below were carried out from March 19 through 22, 1984. Two members of the consultant team stayed with the promoter in his residence and observed his daily routine. What follows is a summary of the full case study which is presented in Volume II.

Chococoniri is an Aymara community located in a barren treeless valley at an altitude of about 14,000 feet, 23 km. west of Juli in the Department of Puno. The area comprises 2,016 barren hectares, half of which is floodplain, with a dispersed population of 490. The demographic breakdown consists of 268 adults (115 men and 153 women) and 222 children. This population is divided into 95 families.

The community was officially recognized on 22 September 1981 by Ordepuno. Local government structure and function follow official guidelines, consisting of an Asamblea General led by an elected president, a Consejo de Administración, and a Consejo de Vigilancia. In addition to a health promoter, there are also promoters in agriculture, livestock, and social work. The social worker has the varied responsibilities of organizing the Club de Madres; giving talks on home improvement, health, and women's activities; and coordinating her activities with health promoter.

2. Health Promoter Background and Current Activities

The health promoter in Chococoniri is a 38-year-old male, married with four children, who has been working as a promoter for four years. He had a three-month training course in March 1980 sponsored by UNICEF, followed by three MOH refresher courses of three days' duration each in 1981, 1982, and 1983. Prior to his promoter training, he worked empirically as a partero and administered medicines. He has completed three years of secondary education.

The promoter was selected because of his previous experience in health and public trust in his abilities. Both community leaders and Ministry personnel were involved in his selection, and he was confirmed by a voice vote in the Community Assembly. The week prior to our stay

in Chococoniri, the promoter expressed a strong desire to stop working as a promoter; he said it was taking too much time away from his farming, livestock, and craft cooperative activities. The community president and Assembly, however, prevailed on him to continue working and he reluctantly agreed.

He is a very active promoter, particularly in comparison to those in neighboring communities (see table V-14 for comparative figure). When we arrived in Chococoniri he had given his most recent educational talk only four days ago. He said that he gives most of his talks to people when they are gathered for Community Assemblies or to the Mothers' Club. His topics are varied and include environmental sanitation, hygiene, maternal/child health, birth control, well-child care, latrinization, and nutrition.

TABLE V-14
PROMOTER ACTIVITIES FOR FEBRUARY 1984: CHOCOCONIRI AND THREE NEIGHBORING COMMUNITIES

	Chococoniri	Vacha Yacango	Puca Yacango	Pullallmarca Yacango
Total Consultations	42	9	26	37
Adults	25		13	26
Children	15			7
Pregnant Women	2		3	4
Wound Dressing	13		7	7
Medicines	6			7
Injections	-		2	9
Home Visits	13			8
Vital Signs	9		1	
Referrals	-	3		
Herbal Prescriptions	-	3		
Miscellaneous	1	3	6	16
Total Talks	2	2	2	1
Environment Sanitation	1			1
Potable Water	-		1	
Tuberculosis	-		1	
Vaccinations	-	1		
Rabies	-	1		
Hygiene	1			

As an example of preventive activities, there are twenty latrines in the community, one for every five families, all installed with the promoter's help. The projected number is 50, to be completed within four to five months. The promoter also taught people to boil their drinking water, which comes exclusively from the river and is often contaminated.

The promoter has also collaborated in vaccination campaigns and is aware of the importance of immunizations, especially DPT, BCG, and measles. Surprisingly, he did not know pregnant mothers should receive a tetanus immunization.

His activities cover the entire spectrum elicited in the promoter questionnaire and also discussed in Chapter IV, with the exception of thick smears for malaria, non-existent at this high altitude. Of all his health work, he considers giving first aid most important; consequently, he feels more should be taught about the proper use of medicines in MOH training courses.

Patients with problems beyond his ability and experience are referred to the hospital in Juli. During the past month he had referred nine patients, primarily expectant mothers.and patients with high fevers. He sends referral cards with each patient. The three most common diseases in the community are, in order of incidence, diarrheas in children (newborns to age six), fevers in children, and respiratory infections.

A number of community residents have requested birth control information; however, because he has no family planning commodities to distribute, he has referred them to the hospital in Juli. He notes that there is a growing interest in family planning, simply because deteriorating economic conditions due to droughts and floods have made supporting and raising children too expensive.

Chococoniri has an active Health Committee but no community pharmacy. The Health Committee's work has largely been in the coordination of vaccination campaigns and the funding of Interdisciplinary Community Development Teams. The Interdisciplinary Teams consist of public health nurses, epidemiologists, and sanitation personnel; in previous years these were financed by the state. Now, with a decrease in public spending, communities must cover the expenses of such teams. Consequently, most of the Committee's work is raising funds to pay for Ministry health services.

The promoter has been visited only once by Area Hospital personnel over the past two years. During this visit he was asked questions about his work, his activity records were copied, and he was criticized for not doing enough prevention. Occasionally he has been given some hydrogen peroxide and iodine by visiting supervisors. The promoter, on the other hand, visits the local hospital in Juli three times a month to turn in his records and buy medicines in the hospital and local pharmacies.

He spends about 7,000 soles per month in purchases of materials and medicines at the hospital and 10,000 soles per month at the pharmacy for medicines not available at the hospital. The only charges he makes are for medicines to cover costs; he claims to make no profit. All other services are free -- consultations, first aid, injections, wound

dressings, and deliveries -- so that he derives no remuneration for his health promoter work. However, beginning in April of this year, he will no longer be required to contribute manual labor to communal activities. He feels that his promoter work does reduce his income considerably, but he was not able to give an exact figure.

Regarding the number of injections given, he is an exception to what appears to be the rule for most promoters surveyed (see Chapter IV): he gave no injections during February and only three during the previous four months. He says that tablets and capsules are just as effective, providing the patient does not have severe diarrhea or vomiting. The medicines he most commonly administers are antibiotics -- penicillin, ampicillin, and chloramphenicol -- and analgesics (antalgina and aspirin).

In general, he likes his promoter work because he can treat diseases and help his community. He had thought of quitting, but, as mentioned above, the community asked him to continue. He feels that he gets more than enough community support and is, in fact, asked to work more than he would like.

The most important work for the promoter, he said, is first aid, curative consultations, and preventive activities. The most important problems he cited in his promoter work have been the lack of any kind of remuneration and the lack of materials and medicines. The major problems in Chococoniri have been the extended drought followed, this year, by floods, resulting in the river flooding the pampa used for livestock grazing. Also he mentioned the lack of all-weather roads; during heavy rains the existing roads become unpassable, so that the communities are effectively isolated.

3. Promoter Medical Knowledge

The questions designed to measure medical knowledge revealed that the promoter was knowledgeable in some areas and lacking in others. On the diagnostic signs for dehydration in children, he named vomiting, weight loss, sunken eyes, and frequent liquid stools, but failed to mention fever, fallen fontanelle, lack of appetite, dry mouth, intense thirst, abdominal pain, and wrinkled skin. He recommended suero casero and hygiene as the best treatments for infant and child diarrheas, although his own records show that he primarily uses chloroamphenicol. Diets during diarrhea treatment, he said, should consist of large amounts of fluids and solid foods. In order to prevent diarrheas, water should be boiled, hands washed after excretion, and the quality of water sources improved. For the child with fever, he recommended that the patient should be brought to the promoter to determine the cause.

He identified the signs of alarm during pregnancy as bleeding and dislocation of the fetus from its normal position. Before attending a birth, he said, the promoter should wash his hands using a brush, boil the scissors, make sure the bed is clean, wash the mother's genitals, and palpate the abdomen to determine fetal position. After birth, the child should be transferred to the Health Center or hospital if it does not cry and/or if it develops a fever within several weeks to a month post-partum. During the past year he has attended two births.

The symptoms for tuberculosis cited by the promoter were: nocturnal sweats, chronic cough, tiredness, and a general feeling of illness. He said that currently he had no tubercular patients in Chococoniri.

4. Equipment and Medicines

The equipment the promoter had on hand conformed with what had been issued by UNICEF in the late 1970's. He still had all the items in that kit except for the bicycle, stolen when he went to Juli. He replaced it with his own funds, only to have it stolen again.

The medicines he had in stock included injectable antibiotics, but he had never used them and they looked quite old. In fact they had been left to him by the previous promoter who had stopped working and left the community four years ago.

He had recently received a number of other drugs from the Catholic parish in Juli but had yet to be told how they should be used; he was anticipating a refresher course from the parish to teach him more about the use of medicines and how much he should charge for them. All in all, his stock of medicines was quite large and varied, but he used no more than ten kinds of medications. Table V-15 lists the medicines in his possession, while Table V-16 shows the number of patients seen, grouped according to diagnosis and the corresponding medicines/treatments given.

For diagnostic reference and procedure guides, he had a well-used copy of Donde No Hay Doctor, a pamphlet on tuberculosis, a nutrition quide, and a small book on rural housing.

5. Record of Activities

Although the promoter has been working as such for four years, his recorded activities only go back 17.5 months, to 17 September 1982, since his previous book had been lost. In his current logbook he records the date, patient name, medicine given, number of wound dressings, weight, vital signs, (temperature only), whether Health Post or home visit, prenatal control, referrals, educational talks, and injections.

We copied his patient and treatment activities record for the past five months and summarized it in Table V-16. In addition to seeing 63 patients during this time, he also noted having given 33 educational talks. These, however, were not talks to groups but one-on-one exchanges during routine patient consultations. According to his record book, he had only given three group talks in total, amounting to less that one per month, on latrines and potable water, rabies, and the new medicines he had gotten from the parish in Juli. Out of the 63 patients seen in the past five months, the most common consultation was for the referral of pregnant women to Juli for prenatal exams (17 cases), fevers (8 cases), and diarrheas (8 cases). The rest consisted of lacerations, colds, and a variety of other less common complaints.

The treatments for these complaints involved primarily the use of oral antibiotics for diarrheas, some high fevers, and infections. Dosages were usually one or two 250-mg tablets of ampicillin. In a few cases, higher dosages are noted, but, as a rule, most were sub-therapeutic. Analgesics were also used for high fevers and an antispasmodic for stomach pain (colerina). The promoter also prescribed a wide range of herbs (also noted in Table V-16), but time limitations did not allow for the elicitation of classificatory scheme and use list.

TABLE V-15

PROMOTOR MEDICINE STOCK

Type	Name	Quantity	Frequency of use
Analgesics	Antalgina	10cc bottle	Frequent
	Duralgina	6 ampules	Never used (outdated)
Antibiotics	Ampicillin	100 500 mg tabs	Frequent
	Chloramphenicol	13 bottles for reconstitution & infection 1 gram each	
	Chloramphenicol	300 250 mg tabs	Frequent
	Optencillin 2,4 mega	2,400,000 unit 2 bottles for injection	Never used (outdated)
	Penicillin	4 bottles 1 gm each per inspection	Occasional
	Streptopen Plus Pen G	11 bottles - injectable	
	Sulfanilamide powder	large bottle 1/2 full	Occasional
Antiparasitic	Pirvimo Pamoato	50 ml bottle (10 mg/ml)	Occasional
Antispasmodics			
	Sanitropin - G	10 ml bottle 1/2 full	Occasional
Vitamins	Vitamin B_{12}	34 ampules 1000 mg	Never used
Miscellaneous			
	Isopropyl Alcohol	100 ml bottle 1/3 full	Frequent
	Pentrex (just received from Parish)	100 g bottle	Never used
	Axybion (just received from Parish)	small bottle white powder	Never used
	Gentian Violet	20 ml bottle	Occasional

In February he had also measured heights and weights and recorded the names of 87 children who were assigned to the following Gomez categories: 18 normal, 25 with first-degree malnutrition, 3 with second-degree, and none with third-degree.

During this same five-month period the promoter also referred 16 patients to the hospital in Juli. Referrals, in these cases, do not necessarily mean that the patient actually went, but merely that the promoter suggested that he or she see a physician.

The promoter's records show that he gave only five intramuscular injections, one a month, far below the average number for all promoters surveyed. His preference was to give antibiotics and analgesics orally, unless the patient had severe diarrhea or vomiting.

Fifty-two out of the 63 patients he had seen had come to his house; the others were treated in the school, located in the center of this dispersed community.

Table V-17 shows all patients the promoter recorded having seen since September 1982. Over 17 months he had seen 266 patients, an average of 188 per year. The total population of Chococoniri is 490; if one assumes that each resident has four illness episodes per year, of which half may have been treated at MOH facilities, then the promoter provides coverage for about 19% of the remaining episodes. Because of the relative isolation of the community, it is quite possible that fewer illnesses are treated at hospitals or Health Centers, so that the promoter's coverage may actually be lower.

6. Observed Promoter Activities

Chococoniri has a nearly completed community Health Post, a large adobe building lacking only furniture and some minor interior work. The promoter is looking forward to the completion of the post, so that he can regularize his working hours. As things are now, patients come to see him at his house at almost any hour of the day or night, as well as at the school when he is there.

The promoter's residence consists of four separate adobe structures, three sleeping quarters and a kitchen, and several stone-fenced pastures for a herd of 27 alpaca, 30 sheep, and three cows. On one side of his house is a large garden where he has planted lettuce, cabbage, and onions which, most probably due to the 14,000-foot altitude, are not doing well; he says they do not mature, or do so very slowly. Twenty other families have also begun vegetable gardening. On the other side of the house is a large field of bitter potatoes (papa amarga), and below is a field of barley (cebada) used for animal forage.

His medical work is done in one of the adobe structures, which is furnished with two beds, a large table and chairs, and also contains weaving equipment. He keeps his medicines and supplies in a metal box on the table; his scale for newborns is kept in the schoolhouse.

His daily routine is varied, but he is generally home in the morning and in the community center, across the river, in the afternoon. When not with a patient, he is constantly knitting scarfs for the craft cooperative he has organized and directs. His wife and children tend to the animals and most of the agricultural activities.

TABLE V-16

PROMOTER DIAGNOSIS & TREATMENT: 20 Oct., 1983
19 March, 1984

Number of Patients	Adult/Child	Sex	Diagnosis	Treatment
17	Adults	Female	Pregnancy	Referral for prenatal care
1	Adult	Male	Fever	Antalgina tabs (analgesic)
2	Adults	Female	High fever	Ampicilina
2	Child		Fever	Baths, antalgina
3	Child		High fever	Herbs, penicilline tabs
2	Child		Diarrhea with blood	Chloramphenicol tabs
1	Child		Diarrhea with blood	Antalgina tabs
4	Child		Diarrhea and vomiting	Chloramphenicol tabs
1	Adult	Female	Diarrhea with blood & mucous	Chloramphenicol tabs
1	Adult	Female	Lacerations	Dressings
3	Adults	Male	Lacerations	Antiseptic solution
1	Child		Lacerations	Antiseptic solution
1	Child	Male	Infected wound	Penicillin 3 tabs
1	Adult	Female	Infected foot	Penicillin 4 tabs
1	Adult		Infected foot	Antiseptic solutions
2	Child	Female	Common cold	Herb tea
1	Adult	Female	Common cold	Cough syrup
2	Adult	Male	Common cold	Herb tea
3	Adult	Female	Stomach pains (colerina)	Niocina (antispasmodic)
1	Adult	Female	Stomach pains	Herb tea
1	Adult	Male	Pneumonia	Referral to hospital
1	Child	Male	Pneumonia	Referral to hospital
3	Newborns		Newborn	Referral for pre-natal care
1	Adult	Male	Epilepsy	Referral to hospital
1	Child	Male	Epilepsy	Referral to hospital
1	Adult	Female	Chills (escalofrio)	Herb tea
1	Adult	Male	Childs (escalofrio)	Herb tea
1	Adult	Female	Bronchitis	Ampicillin tabs
1	Adult	Female	Headache	Antalgina (analgesic)
1	Child		Eye infection	Opthalmic penicillin
1	Adult	Male	Edema	Hot baths
63	TOTAL			

TABLE V-17

PATIENT LOAD AND REFERRALS: 17 SEPTEMBER 1982 - 19 MARCH 1984

Year	Month	No. of Patients	Referrals
82	September (13 days)	10	4
82	October	8	3
82	November	18	4
82	December	15	3
83	January	18	3
83	February	9	1
83	March	31	6
83	April	8	1
83	May	25	6
83	June	7	1
83	July	9	2
83	August	30	3
83	September	22	3
83	October	18	0
83	November	7	0
83	December	6	1
84	January	22	7
84	February	13	1
84	March (19 days)	4	2
		280	51

During our stay in Chococoniri, we observed three patient encounters in the promoter's house, and nine brief examinations and treatments in the schoolhouse. He took all patients' temperatures, carefully cleaned the thermometer in isopropyl alcohol, and washed his own hands before working with each patient. His manner was very professional, serious, and un-rushed. The three patients he saw at his house had been waiting for heavy rains to stop and the river to go down before they could reach even the promoter, which indicates their isolation from any other modern health alternative.

What follows are descriptions of his diagnostic procedures and treatments:

Patient #1 Complaint: lower-back pain, mostly on left side, (epigastric pain) and dry mouth in morning
Diagnosis: gastritis (colerina)
Treatment: hot herbal infusion (vervina blanca) raw potatoes three times per day; return for check-up in two days; if not better, will give neomycin or buscapina; hot packs on lower back and forehead every 12 hours.

Narrative: The promoter first took the woman's temperature, which was normal; then he went on to do a quick physical exam, consisting of pulling up her blouse and tapping her lower back with the edge of his hand. All the while he spoke to her in a reassuring manner. Every thirty seconds the woman groaned a little, letting out a sigh.

It turned out that she had crossed a river, chest deep, in very cold water. The promoter felt the cold water was the cause for both stomach and lower-back pains. The raw potatoes were to relieve the stomach pains, while the herbal hot packs would alleviate the lower-back pain. For the herbs he dashed outside and, within five minutes, returned with a green plant he called vervina blanca. He spent considerable time explaining how to make the herbal infusion and the procedure for soaking the cloth for the hot pack in the same solution. Hot packs were to be left on only while still warm.

The woman left feeling very reassured and satisfied with her visit and prescribed treatment. There was no talk about payment of any kind and none was offered.

Patient #2 Complaint: toothache
Duration: 25 minutes
Patient: female in middle 20s
Diagnosis: abscessed upper-right second incisor
Treatment: referred to hospital in Juli to see a dentist

Narrative: First the promoter took the woman's temperature; it was normal. He then set her down in the bright light near the window and looked in her mouth. A large black abcess was clearly visible in the gum just above the tooth; it was tender to the touch. He checked all the "Dental" sections in Donde No Hay Doctor,

and explained to the patient that the proper treatment was beyond his ability. As with the first patient, he spent considerable time in reassurance, explaining the nature of the problem and suggesting what should be done.

The woman also told him about a 7-1/2 year old child in her household with a severe nosebleed. Again he consulted Donde No Hay Doctor and told her to bring the child to see him. There was no charge for the tooth exam or the advice for the nosebleed.

Patient #3 Complaint: toothache
Duration: 30 minutes
Patient: 9-year-old girl
Diagnosis: two abscessed teeth
Treatment: lance pustules

Narrative: The promoter took the girl's temperature; after seeing it was normal, he moved her over to the window and looked in her mouth. She had two small lumps in the labial side of the gum over the left upper canine and first pre-molar. There was no visual evidence of pustules. He decided to cut into the swellings with a pair of straight bandage scissors. Just blood came out, with no evidence of pus or any reduction in the size of the swelling; the girl was told not to drink hot soups or herb teas, because they would be much too hot and would irritate her infected teeth. She was told to come back in two days, and if the swelling had not gone down, she should go to Juli and see a dentist. There was no charge for the promoter's service.

During the afternoon of 22 March 1984, the promoter went to the school in the center of this highly-dispersed community. There he saw nine more patients who had come to town for the Asamblea Comunal and who had decided to see the promoter at the same time. He sat down behind a small desk and the patients came one by one to see him, while others waited in the corner for their turn. Each consultation took about five to ten minutes. These encounters are summarized here:

Sex	Age	Complaint	Treatment
M	64	stomach pains	papas amarga crudas
F	31	eye inflammation	opthalmic penicillin
M	66	"	"
M	62	"	"
M	48	"	"
F	45	back pain and productive cough	told to bring sputum sample and then apply hot packs with herbs
F	25	"	"
M	36	"	"
M	67	chest pain and fever	ampicillin

The patients with productive coughs were also asked to bring sputum samples from other family members for analysis in Juli. No one was charged anything, except for the last patient who gave the promoter 1000 soles for five 500-mg. ampicillin tablets.

The promoter was extraordionarily busy during the time of observation. There are two possible explanations for this. One is that he wanted to show us what he could do and had a large number of patients come by previous arrangement. The second is that we just happened to hit a peak of activity due to the coincidence of our visit with two Asamblea meetings on two consecutive days, as well as the height of the river which had held back travel of any kind for a number of days.

The promoter's record book supports the second explanation. The standard pattern appears to be that there are long periods of inactivity, followed by days when many patients show up. The three patients that came to his house in the morning were surprised to see us and came from some distance away, and he said that the afternoon visits at the time of the Community Assembly were not at all unusual. The conclusion is that we were just fortunate enough to stumble on a natural peak of promoter activities.

The promoter's diagnostic and treatment skills were somewhat inadequate, if not completely empirical. In the first case where the woman was diagnosed as having gastritis, she could, in fact, have had a kidney ailment, a gastric ulcer, or any of a wide range of other diseases. The treatment was not specific for any one diagnosis; nevertheless, it was accepted by the patient and may well have had more of a placebo effect than anything else.

The two girls with the tooth abscesses were of a different order. The first infection was more advanced than the second and referral of appropriate: the infection was extensive and needed an intervention more sophisticated than a simple lancing. Whether or not the patient went to Juli is, of course a question: if she did go, the tooth most probably would have been pulled.

The lancing of the second abscess was not prudent; the abscess was not very advanced and the wound may well become infected; the untreated abscess will probably get worse and the teeth eventually be lost. An antibiotic treatment course and/or referral would have been a better choice.

Of the nine patients seen the following afternoon, the four with eye inflammations most probably had conjunctivitis; however, the treatment with opthalmic antibiotic may well have proven ineffective, since the infections were most probably viral and not responsive to penicillin. In fact, two of the patients had already been treated with antibiotics for over a week with no noticeable improvement.

The three patients with back pain and productive coughs could have had anything from tuberculosis to pneumonia; taking sputum samples was appropriate. There is a question, however, whether or not the samples were actually sent to Juli for TBC acid-test stains and gram stain for other organisms. And, even if the diagnostic tests were done and the proper prescription conveyed, there is no guarantee that the appropriate antibiotic would be selected and the treatment course completed.

The man with chest pain and fever could have had a number of ailments: a cardiac problem; pneumonia, influenza, or a combination of diseases. He claimed to have been feeling sick for some time, and has been taking ampicillin for a while. The promotor gave him some more; however, the dosage of the drug appears to have been inadequate and unrelated to any concept of an appropriate treatment course.

For child and infant diarrheas, his standard treatment of one 250-mg. tablet of chloramphenicol is ill advised. He does know how to make suero casero, but, his record book does not indicate that he has ever prescribed it, nor has he ever had any oral rehydration salts.

7. Conclusions

The promoter is clearly very popular in Chococoniri, is actively interested in improving both economic and health conditions in his community, and is, in fact, the only person with any kind of training to deliver health care. People who are sick come to him and expect to receive a remedy. As evidenced in observation of his diagnoses, treatments, and records, he does practice what amounts to empirical medicine. At the same time, he wants to receive more training, especially in the administration of medicines, and willingly admits his lack of knowledge of appropriate dosages and treatment courses.

In view of the distance and difficulty in getting to the nearest Health Center or hospital, this promoter should be among a group slotted for more training in diagnosis and use of drugs. Even though he obediently refers patients to the Juli facilities when cases are beyond his capacity, at least some of those referred never go. He thus becomes a sole source of care for many, as such, his training needs should be met. Beyond this, his length of service, education (three years of secondary school), and interest, may even qualify him for sanitario training, which would be compatible with community needs. Chococoniri had, in fact, requested a Health Post staffed by an auxiliary over a year ago; the director in Juli acknowledged the request, but the Region has not yet acted on it. Many communities in similar circumstances have made the same request and numerous new health posts are planned; realization of such plans is painfully slow while community health services continue to remain totally inadequate.

CHAPTER VI. THE FINANCIAL CONTEXT

A. Introduction

At all levels in the health system, and certainly at the lowest levels, health workers complain of lack of support. Promoters would like salaries and need a more regular supply of medicines and other supplies. Health Center and Health Post staff need more supplies and travel allowances, if they are to adequately supervise the lower levels. The area and regional levels complain of the need for greater budgetary allocations and more timely delivery of financial and material resources. It seems likely that these deficiencies contribute directly to the low productivity observed at all levels in the system and verified at the promoter level by the survey.

The financial and material deficiencies appear to have two causes. First, the administrative and management systems do not currently deliver the resources to where they are needed when they are needed. For example, MOH money for travel allowances is rarely if ever available in the areas and regions during the second half of the month. Second, it is also clear that real financial resource constraints limit the Ministry of Health's ability to support with supplies and services the health service delivery infrastructure that is already in place. Inadequacies in the current level of support result in low levels of productivity and cost-effectiveness.

B. Level of Government Health Effort

The Government of Peru makes a much greater health effort than is commonly acknowledged (see Table VI-1). 4.4% of the total budget goes directly to the Ministry of Health. However, when comparisons are made with other countries, the percent of the budget that is usually quoted is the proportion of the operating budget that is allocated to health. Furthermore, the Peruvian budgetary system does not show all expenditures that are frequently attributed to health. For example, all debt amortization and interest payments are included under the Ministry of Economy and Finance, even though part of the debt was incurred for health projects There are probably other health expenditures which further investigation might identify. However, if one looks only at the government's operating budget, and subtracts the interest payments, health accounts for 7-8 percent of total operating allocations, with no evident trends, either towards greater or lesser proportional allocations.

TABLE VI-1

MINISTRY OF HEALTH BUDGET AS A SHARE OF THE NATIONAL BUDGET[1] (10^9 Soles)

Year	1	2	3	4	5	6	7	8	9	10	11	12
	Total Budget			Adjusted Total Budget[2]			Current Budget			Adjusted Current Budget[3]		
	National	MOH	%	National	MOH	%	National	MOH	%	National	MOH	%
1984	10728	472	4.4	7166	472	6.6	7616	390	5.1	5304	390	7.4
1983	5167	212	4.1	3313	212	6.4	3146	193	6.1	2344	193	8.2
1982	3071	142	4.6	2014	142	7.1	2009	120	6.0	1448	120	8.3
1981	1850	81	4.4	1198	81	6.8	1202	62	5.2	904	62	6.9
1980	967	37	3.8				591	28	4.7			

SOURCES: Data for a given year are taken from Annexes 1 and 2 of the Ley del Presupuesto de la República for that year. (See Financial Reference Nos. 1,2,3,11 and 5)
Financial Reference No.1 did not contain information on the magnitude of debt interest and amortization payments for 1980.

1 Does not include allocations to the Corporaciones Departamentales for health and environmental sanitation projects. In 1983, these allocations were 9 billion soles for health projects and 43 billion for environmental sanitation projects.

2 The "adjusted total budget" does not include amortization and interest payments on the national debt. It is not known what proportion of these payments is properly attributable to the health sector.

3 The "adjusted current budgets" do not include interest payments on the national debt.

In brief, the level of the government's health effort is better than it is frequently represented, and given the current political and economic context, should be regarded as acceptable. It appears unlikely that the health sector will receive a larger share of the budget, nor is it clear that health deserves a larger share given other national priorities.

C. Growth of the MOH Budget in the 1980s

The Ministry of Health's budget has increased from 37 billion soles to 472 billion soles since 1980. Most of this increase is due to the collapse of the purchasing power of the sol. Tables VI-2 and VI-3 show the same budgets, but Table VI-3 reflects the purchasing power of those budgets in terms of current U.S. dollars. According to this measure the Ministry's purchasing power increased rapidly in 1981 and 1982 and then declined almost as rapidly in 1983 and 1984. As a result, the Ministry's 1984 budget is only 5% greater than its 1980 budget, and if the decrease in purchasing power of the dollar is considered, the overall purchasing power of the Ministry has certainly decreased. Meanwhile, its target population has probably increased by more than 10%.

Reliable figures were not readily available on changes in the size of the Ministry of Health's physical and human infrastructure. This infrastructure has, however, grown, with many foreign donors supporting development costs, but insisting that the Ministry bear most recurrent costs. This fact combined with the stagnant or decreasing purchasing power of the budget is one underlying cause of the chronic logistics and management support problems which now characterize the health system.

D. Change in the MOH Budget Structure

During the 1980-1984 period, the Ministry of Health budget has seen a very dramatic shift in financial resources away from the purchase of supplies and services and towards the payment of salaries. In 1981, for every 1000 soles budgeted for salaries, only 351 soles were budgeted for supplies and services. Considering that salaries have almost certainly increased less rapidly than the cost of medicines and medical supplies, one can infer that the average MOH health worker today has, at his disposal, less than 50% of the material resources that were available to him in 1980.

The trends are very clear in Tables VI-4 and VI-5. Budget allocations for non-personnel expenditures are decreasing as a proportion of the total at a very dramatic rate. In fact, the budgetary allocation expressed in current U.S. dollars for materials and supplies now stands at less than 85% of 1980's actual expenditure for these items.

TABLE VI-2

RECENT GROWTH OF THE MOH BUDGET BY LINE ITEM (10^6 Soles)

		1 1980	2 1981	3	4 1982	5	6 1983	7	8 1984	9
01	Renumeration	21,654	31,149	43.8	69,909	124.4	121,851	74.3	266,949	119.1
02	Materials and Supplies	10,354	16,557	59.9	37,102	124.1	48,216	30.0	79,274	64.4
03	Services	1,293	3,694	185.7	9,397	154.4	12,785	36.1	19,794	54.8
04	Current Transfers	6,115	8,630	41.1	2,140	-75.2	3,176	48.4	5,718	80.0
05	Pensions	1,829	2,202	20.4	3,706	68.3	6,545	76.6	18,677	185.4
06	Interest and Commissions									
07	Feasibility + Other Studies	198								
08	Constructional	6,593	18,679	183.3	22,322	19.5	19,262	-13.7	81,861	325.0
09	Capital Goods	581								
10	Loans, Investments + Others				1					
11	Capital Transfers	400	300	-25.0		-100.0				
12	Debt Amortization									
	TOTAL	49,017	81,211	65.7	141,908	74.7	211,835	49.3	472,273	122.9

SOURCES: Column 1: Finance Reference #8 (this column contains actual expenditures, while other columns contain initial authorized budget.) The total budgeted expenditures was only 37,196.
Column 2: Finance Reference #2, Annex 2.
Column 4: Finance Reference #3, Annex 2, pgs. 76+77 (Column does not add because the total reflects an unspecified, but mandatory cut of 2,669. Salaries, the largest line item, was not cut.)
Column 6: Finance Reference #11, Annex 2, pg. 54.
Column 8: Finance Reference #5, Annex 2, pgs. 52+53.

1 Beginning in 1981, line items 07,08 and 09 were aggregated in the published data used in this study. To calculate the percentage growth from 1980 to 1981, the 1980 figures were similarly aggregated.

TABLE VI-3

RECENT GROWTH OF THE MOH BUDGET BY LINE ITEM (10^3 $ U.S.)[1]

		1 1980	2 1981	3	4 1982	5	6 1983	7	8 1984
01	Renumeration	86,271	90,026	4.4	137,076	52.3	122,587	-10.6	116,065
02	Materials and Supplies	41,251	47,853	16.0	72,749	52.0	48.507	-33.3	34,467
03	Services	5,151	10,676	107.3	18,425	72.6	12,862	-30.2	8,606
04	Current Transfers	24,363	24,942	2.4	4,196	-83.2	3,195	-23.9	2,486
05	Pensions	7,287	6,364	-12.7	7,267	14.2	6,545	-9.9	8,120
06	Interest and Commissions								
07	Feasibility and Other Studies	789							
08	Construction	26,267	53,986	83.8	43.769	-18.9	19,378	-55.7	35,592
09	Capital Goods	2,315							
10	Loans, Investments + Others				2				
11	Capital Transfers	1,594	876	-45.6		-100.0			
12	Debt Amortization								
	TOTAL	195,017	234,714	20.4	278,251	18.5	213,114	-23.4	205,336

SOURCES: Same as for similarly titled table in 10^6 Soles.

1 Rates of Exchange used were:

1984	2,300
1983	994
1982	510
1981	346
1980	251

The 1984 rate reflects the approximate rate on 1 January 1984. The rates for all other years were calculated as the simple average of the average during the 1st quarter of the year and the fourth quarter of the previous year as published by the Central Bank of Peru.

TABLE VI-4

DISTRIBUTION OF MOH OPERATING BUDGET BY LINE ITEM (10^6 Soles)

		1 1980	2 %	3 1981	4 %	5 1982	6 %	7 1983	8 %	9 1984	10 %
01	Renumeration	21654	53	31149	50	69909	57	121851	63	266949	68
02	Materials + Supplies	10354	25	16557	27	37102	30	48216	25	79274	20
03	Services	1293	3	3694	6	9397	8	12785	7	19794	5
04	Current Transfers	6115	15	8630	14	2140	2	3176	2	5718	1
05	Pensions	1829	4	2202	4	3706	3	6545	3	18677	5
	TOTAL	41245		62232		122254		192573		390412	

SOURCES: Same as for table entitled "Recent Growth of the MOH Budget by Line Item (10^6 Soles)

TABLE VI-5

CONSOLIDATED DISTRIBUTION OF MOH OPERATING BUDGET BY LINE ITEM[1] (10^6 Soles)

	1 1980	2 %	3 1981	4 %	5 1982	6 %	7 1983	8 %	9 1984	10 %
Renumeration + Pensions	23483	67	33351	62	73615	61	128396	68	285626	74
Materials and Supplies	10354	29	16557	31	37102	31	48216	25	79274	21
Services	1293	4	3694	7	9397	8	12785	7	19784	5
TOTAL	35130		53602		120114		189397		384694	

SOURCES: Same as for table entitled "Recent Growth of the MOH Budget by Line Item (10^6 Soles)

1 Pensions have been added to renumeration. The aggregate should be considered as the total for personal services. "Current Transfers" have been disregarded because these are used to support programs in general and the actual distribution of expenditures among the three line items (personal services, supplies and other services) is not known.

Remember that 1980 figures are actual expenditures, not budgetary figures. The initial budget probably showed a lower proportion going to renumeration.

E. Ministry of Health Expenditures Patterns

The Ministry of Health, like the government in general, over-expends its budget. This is due to the high rate of inflation, which gives rise to the need to adjust both salary and other line items, if originally programmed purchases are to be made. In 1981 and 1982, however, priority was clearly given to salary adjustments. In fact, in 1982, the initial budget for supplies and material was underspent by 9% and that for services was underspent by 40%. Travel and travel allowances were underspent by 26% while maintenance and repair was underspent by 64% (see Tables VI-6 and VI-7).

The expenditure pattern thus exacerbates the shift of resources away from materials and supplies and towards salaries, noted in the budget structure discussion. Thus in 1982, the budget allocated 61% of its operating expenditures to salaries (including pensions), but in fact, 75% of its actual expenditures were for salaries. A similar shift in the execution of the 1984 budget would push the proportion spent on salaries into the 80-85% range. Financial personnel at the regional and area levels feel this may be a conservative assessment.

The consequence of this expenditure pattern will be that the current chronic shortages will become worse. The productivity of the health system, both in terms of the quality and quantity of services will almost certainly decrease from its current low level.

F. Ministry of Health Internal Income

One relative bright spot in this analysis of MOH finances is the increase in internal income that is being generated from fees. This income is generated mostly at the Health Center and Area Hospitalaria levels. The budgeted amount has not grown as a percent of total MOH budget. It has shown some tendency to grow as a percent of the allocation for supplies and services. Furthermore, it appears that actual collections are usually more than double projected collections. As a result, actual collections in 1982 equalled 37% of the total expenditures for supplies and services (see Table VI-8).

The lowest level in the health system which has financial personnel is the Area Hospitalaria. As a result, fees collected lower down in the system must be turned into the area level, except for a portion which may be used to maintain a small petty cash fund at the Health Center. The Area Hospitalaria staff determine how the bulk of the collected funds will be spent. There is no discernible formal relation between the amount of funds collected and the quantity of funds available to the collecting institution. There appears to be a possibility that Health Centers may be subsidizing the Areas Hospitalarias.

TABLE VI-6

USE OF 1982 MINISTRY OF HEALTH BUDGET

		1 Initial Budget	2 Final Budget	3 (%)	4 Actual Expenditure	5 (4/2)	6 (4/1)
01	Renumeration	69,909	104,902	+50	105,966	+1	+52
02	Materials and Supplies	35,131	37,127	+6	32,091	-14	-9
03	Services	8,946	8,729	-2	5,350	-39	-40
04	Current Transfers	2,140**			2,483*		+16
05	Pensions	3,706**			5,527*		+49
06	Interest and Commissions						
07	Feasibility and other Studies				526*		
08	Construction	20,960	13,831	-34	12,295	-11	-41
09	Capital Goods				2,079*		
10	Loans, Investments and Others	1**					
11	Capital Transfers				24*		
12	Debt Amortization						
	TOTAL	141,908	176,824	+25	166,317	-6	+17
	Special Items						
208	Medicines and Medical Supplies	11,253	13,676	+22	10,992	-20	-2
301	Travel and Travel Allowances	1,431	1,809	+26	1,059	-41	-26
311	Maintenance and Repair	3,948	3,595	-9	1,438	-60	-64

SOURCE: From Finance Reference #8

* From a document in the MOH Planning Office.

** From Finance Reference #3. The figures do not add to the total because of an unspecified (by line item) cut in the budget. The Figures from Reference #8 were adjusted to include the cut while those from Finance Reference #3 were left unadjusted because the document from which the data were drawn was itself incomplete.

TABLE VI-7

USE OF 1981 MINISTRY OF HEALTH BUDGET

		1 Initial Budget	2 Final Budget	3 (%)	4 Actual Expenditure	5 (4/2)	6 (4/1)
01	Renumeration	31,149	40,488	+30	40,462	-	+30
02	Materials and Supplies	16,557	25,120	+52	19,361	-23	+17
03	Services	3,694	3,621	-2	2,945	-19	-20
04	Current Transfers	8,630	9,421	+9	8,701	-8	+1
05	Pensions	2,202	2,810	+28	2,796	-	+27
06	Interest and Commissions						
07	Feasibility and Other Studies		527	00	321	-39	00
08	Construction	18,679	18,974	+2	7,259	-62	-61
09	Capital Goods		1,091	00	1,049	-4	00
10	Loans Investments and Others						
11	Capital Transfers	300	306	+2	306	0	+2
12	Debt Amortization						
	TOTAL	81,211	102,358	+26	83,201	-19	+2

SOURCES: Column 1: From Finance Reference #2
Column 2: From Finance Reference #9
Column 4: From Finance Reference #9

TABLE VI-8

MOH INCOME COMPARED TO BUDGETS + EXPENDITURES (10^6 Soles)

Year	BUDGET Internal Income	MOH Total	% I.I.	Supplies Services	% I.I.	ACTUAL Internal Income	% of Budget	MOH Total	% I.I.	Supplies + Services	% I.I.
1984	13905	472273	29	99068	14.0						
1983	8462	211835	4.0	61001	13.9						
1982	5576	141908	3.9	46499	12.0	13710	246	166317	8.2	37441	36.6
1981	2149	81211	2.6	20251	10.6	5180	241	83201	6.2	22306	23.2
1980	1500	49017	3.1	11647	12.9	3307	220	49017	6.7	11647	28.4

SOURCES: Data for bydgets for a given year are from Annex 1 of the Ley del Presupuesto de la República for that year. (See Financial Reference Nos. 1,2,3,11 and 5.) Actual figures for internal income came from documents in the MOH Planning Office. Actual figures for MOH expenditures for 1982 and 1981 came from tables in this report , while those for 1980 came from Financial Reference No.10.

G. Geographic Distribution of Ministry of Health Expenditures

Data on the distribution of health expenditures among the various health institutions does not appear to be readily accessible. It is widely believed that only a small fraction of the total Ministry budget is expended at the Health Center and lower levels. One study reportedly found that only 7% of a region's budget was expended on these levels.

Given the difficult financial situation faced by all levels in the health system, major shifts in the expenditure pattern towards the primary health care levels will require that primary health care receive priority consideration.

No study of public sector financing of health care in Peru can be complete without considering Social Security. However, analysis of the role of Social Security in the health sector and the financing of health services is beyond both the scope and financial/time resources available for this study. Further development of this analysis should include extension of the study to include Social Security.

H. Recommendations Based on Financial Context

1. All development activities in the Ministry of Health should be directed towards increasing the cost-effectiveness of the existing health service delivery infrastructure.

2. All current health service delivery infrastructure expansion should cease, until improved financial and management support can be developed and the productivity of current infrastructure (buildings, equipment, and personnel) can be raised to adequate levels.

3. All the income should remain with and be utilized by the collecting institution in order to provide an incentive to the institution to collect the fees, and to assure that the fee-payers understand that the money remains in their community.

4. At the time that the promoter has reasonable access to adequate systems support, the Ministry should seriously address itself to the need to pay all promoters on a part-time basis to perform a limited number (no more than 6) of preventive tasks. All curative efforts should be financed by service and pharmaceutical fees, as soon as the pharmaceutical logistics system is functioning and prices and service fees are standardized and publicized.

5. AID (and other interested donors) should do further study of the Ministry's current and likely future financial situation, and should prepare itself to discuss significant policy implications with the highest levels of the new administration when it is identified next March or May; that administration will likely have a very short (6-12 months) "window" during which it could take action on sensitive issues regarding the distribution of resources within the health system.

6. **The financial feasibility of all present and future health projects funded by loans at interest rates which approach those in the commercial sector should be thoroughly evaluated by an independently-funded organization, since these projects will likely draw resources away from other, potentially more cost-effective, activities.**

7. Greatly improved management support (logistics, finance, personnel, supervision, training, and information) systems must be developed for improved productivity but will require ten or more calendar years of donor and Ministry effort to develop.

I. Conclusions

In conclusion, this background study has found that serious financial constraints will prevent the development of a promoter program characterized by adequate levels of productivity. It will not be possible to successfully deal with the promoter or even the primary health care level of the health system without addressing policy issues and management systems on a comprehensive systems basis for the Ministry of Health as a whole.

The financial implications of improved management systems and increased health system productivity will include two shifts in the structure of the Ministry of Health budget. First, there will be a shift of expenditures away from remunerations and towards supplies and services. Second, there will be a shift of resources towards lower levels in the health system. This shift will not -- and should not -- come from a decrease in resources spent at higher levels, but will result from a more rapid rate of growth in expenditures at the Health Center and lower levels in the system. Greater expenditures at these levels should eventually result in lower demand for more expensive services at higher levels.

ANNEX 1

PROYECTOS DE INVERSION SECTORAL
EN SALUD Y SANEAMIENTO BASICO DE LAS CORPORACIONES DEPARTAMENTALES
1983 BUDGET (10^6 Soles)

Department	Salud	Saneamiento Basico
Amazonas	1225	847
Ancash	787	1031
Apurimac	175	941
Arequipa	796	
Ayacucho	636	2432
Cajamarca	100	1049
Callao	364	2193
Cuzco	385	1248
Huancavélica	150	889
Huánuco	322	647
Ica	814	1387
Junín		1030
La Libertad		300
Lambayeque	480	2001
Lima	241	1101
Loreto	370	11250
Madre de Dios	262	600
Moquegua		1037
Pasco	94	1466
Piura	519	3603
Puno	212	1609
San Martín	948	2943
Tacna	70	580
Tumbes	100	200
Ucayali	195	1950
TOTAL	9135	43234

SOURCE: From Finance Reference #4

ANNEX 2

PERUVIAN SOL: U.S. DOLLAR EXCHANGE RATES
QUARTERLY AVERAGES IN SOLES PER DOLLAR

Year	I	II	III	IV
1983	1,100	1,412	1,844	2,159
1982	540	628	736	887
1981	366	408	435	480
1980	258	276	296	326
1979	204	219	232	244
1978	130	142	166	187
1977	72	77	81	107

PERUVIAN SOL
PERCENTAGE CHANGE IN U.S. DOLLAR EXCHANGE RATE
1 JANUARY TO 31 DECEMBER

Year	%
1983	133.6
1982	65.2
1981	46.2
1980	28.5
1979	43.7
1978	65.6
1977	51.1

Elaboración, Departamento de Balanza de Pagos del Banco Central, Lima, Perú.
(Copied from a document at INE.)

ANNEX 3

GENERAL CONSUMER PRICE INDEX FOR METROPOLITAN LIMA
1979 = 100

Month	1980	1981	1982	1983	1984
January	129.4	219.3	354.3	631.1	1,415.9
February	134.5	229.6	367.9	680.0	1,533.7
March	139.0	244.4	391.6	747.6	1,640.2
April	142.6	254.0	408.6	805.9	
May	146.0	265.2	421.4	848.9	
June	150.7	273.6	440.5	915.0	
July	156.8	283.8	459.2	989.8	
August	163.7	294.1	479.6	1,077.0	
September	176.5	303.0	502.3	1,150.6	
October	183.3	316.2	537.0	1,206.5	
November	191.0	329.1	561.3	1,262.4	
December	196.3	339.0	586.3	1,319.6	
Ave. for Year	159.2	279.2	459.2	969.5	

SOURCE: Financial Reference No. 12.

ANNEX 4. FINANCE REFERENCES

1. Ley del Presupuesto de la República para 1980, Decreto Ley No. 22744, Editorial "Inkari," Jr. Sandia 225, Lima, Perú. ("Copia Fiel del diario El Peruano").

2. Ley del Presupuesto de la República para 1981, Ley No. 23233, Ediciones Amuata, Jr. Azangaro 1053 - Of.9, Lima, Perú. (Texto tomado del Diario Oficial "El Peruano" del 31 de Diciembre de 1980. Copia Fiel).

3. Ley del Presupuesto de la República para 1982, Ley No. 23350, M. Berrio R., Jr. Puno 429 - Int. 6, Lima, Perú. (Texto tomado del Diario Oficial "El Peruano". Copia Fiel).

4. Presupuesto del Sector Público para 1983, Ley No. 23556. Ministerio de Economía, Finanzas y Comercio, Dirección General del Presupuesto Público, Lima, Perú.

5. Ley del Presupuesto de la República para 1984, Ley No. 23740, Ediciones y Distribuciones "Palma, " Jr. Camaria No. 950 - of 103 y 138, Lima, Perú.

6. Cuentas Nacionales del Perú, 1950-1982, Instituto Nacional de Estadística, Agosto, 1983, Lima, Perú.

7. Consultant's Report on Financial Systems, Primary Health Care Projects, Ministry of Health, Lima, Peru, September 19 - December 16, 1983. Robert C. Moore, Westinghouse Consultant, Contract C-3024.

8. Estado Consolidado del Presupuesto de Gasto por Programsas. Ministerio de Economía y Finanzas, Lima, Perú. (para el año 1982.) (Incomplete document seen at INE.)

9. Cuenta General de la República, 1981, Tomo 2, Volumen 01, Gobierno Central, Lima, Perú. (Document seen at INE in draft form.)

10. Cuenta General de la República, 1980. Volumen 01, Gobierno Central, Lima, Perú. (Document seen at INE in unpublished form.)

11. Ley del Presupuesto de la República para 1981, Ley No. 23556, Ediciones y Distribuciones "Palma," Jr. Camana No. 950 - Of. 103 y 138.

12. Boletín Mensual, No. 03-84, March 1984, Instituto Nacional de Estadística, Lima, Perú.

ANALYSIS OF PROMOTER SUPPORT IMPACT ON MOH BUDGET

Assumptions

5,000 promoters
patients reimburse promoter for all medicine costs + 10% for contigency ($200).
amortization not funded.

($752 - [220.00 + 103] - $429) x 5,000 = $2,145.00

Current MOH budget = $205,336,000

Adequate promoter support, therefore, requires an increase of 1.04% of 1984 total budget.

Caution:

The promoter cannot be dealt with in isolation. Improved support will never, ever filter down to the promoter unless similarly improved support is also provided to the levels above (Health Post, Health Center, Area Hospitalaria, and regional office). Support at these levels will be more costly.

PROMOTER COSTS
(U.S. $)

DEVELOPMENT

Recruitment	72.00
Training	160.00
Equipment	200.00
Furniture	200.00
TOTAL	632.00

CONTINUING SUPPORT

Preventive Medicine Bonus	120.00
Medicines	200.00
Medical Supplies	25.00
Other Supplies (paper, kerosene, etc.)	50.00
Refresher Training	50.00
Supervision	144.00
Contingency (10%)	60.00
Amortization	130.00
TOTAL	752.00

ASSUMPTIONS MADE TO DEVELOP PROMOTER DEVELOPMENT AND SUPPORT COST ESTIMATES

Recruitment	One health person from training facility plus driver visit each future promoter site three times. Vehicle cost per round trip equals $12.00 (From Piura estimate). Travel allowance is $18.00 per person per day. (also from Piura estimate.) Note: that Piura estimates used per diem rates for training, but did not include recruitment costs.
Training	Based directly on Piura estimates.
Initial Equipment	Nearly double Piura estimate in order to include a scale.
Furniture	Not mentioned in Piura estimate. Promoter should have 2 simple chairs, writing table, box for files, box for equipment, box for medicines and supplies, carrying case.
Preventive Med Bonus	4 days/mo. at $2.50/day for preventive activities.
Medicines	400 people/promoter. Each person receives drugs of 4.50 from promoter.
Medical Supplies	Estimated 25% more than the Piura estimate.
Other Supplies	Rough guess, but pencils, erasers, paper, road to health charts, poster paper, stamps, kerosene for stove, etc. all required.
Refresher Training	Approximately 10% more than the Piura estimate. Once/yr.
Supervision	Once/mo. Sanitario receives travel allowance of $12.00/day. (Sanitario's salary not attributed to Promoter's cost.)
Amortization	Estimated as 10% of recruitment and training costs and 20% of equipment and furniture costs.

CHAPTER VII. ANALYTICAL SUMMARY AND CONCLUSIONS

A. Adequacy of Promoter Role Definition and Selection Process

1. Promoter Role Definition

The major issues in the definition of the promoter role are those of ambivalence* and contradiction. The ambivalence is distributed primarily within the health system itself. Like much ambivalence, it is the product of complexities of context and of ambiguous, puzzling, or difficult alternatives. The result is that, at least at the time of this writing, there was no overall working plan saying how promoters should be used.

The complexities of context are produced largely by institutional culture and geography. It appears that members of the upper stratum of the Peruvian public health pyramid, i.e., doctors, range from doubtful to hostile in their attitudes about the promoter role, although some of these same doctors at an earlier time were involved in such programs and were apparently committed to them. However, nowhere does medical culture easily delegate portions of its special domain, and it is not hard to understand why physicians resist any crucial elements of delegation (e.g., pharmaceutical distribution and mechanical medical intervention) beyond a radius where they can easily supervise or control them. Promoters fall outside this radius; this is less so in the case of sanitarios, whose levels of training are high enough to reduce institutional anxieties.

Below the medical and administrative levels, there are many capable people at the various supervisory levels who might be expected to have a more flexible perspective but who have lost touch with the reality of problems faced by promoters, probably because they have had little contact with them over the last two years. Thus, ideas about what promoters should and should not be doing are sometimes too rigid, conservative, and categorical, (e.g., promoters should not be active in family planning, except for giving talks; promoters should not be dispensing any antibiotics whatsoever; promoters should not be giving injections at all; and so forth).

Other elements of complexity are introduced by the sheer numbers of models of primary health care in Peru generated by PVOs (see Chapter I) which do, or will, include some sort of promoter-like person, and by

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* Ambivalence = uncertainty or fluctuation, especially when caused by the inability to make a choice or by a simultaneous desire to say or do two opposite things.

the public sector itself, at least sometimes in response to financial and ideological pressures from foreign donors (AID, IBRD, BID, GTZ, PAHO) (see Appendix N). To this, Peru adds its own characteristics: size, communication problems, ethnic divergences, and not fully understood epidemiological variability. There is so far no full, reasonably valid epidemiological picture of rural health status (e.g., true incidence of diarrheal diseases). Since there are almost no laboratory facilities in rural areas, specific pathogens customarily remain unknown. Without solid epidemiological statistics, setting program objectives, including promoter objectives, cannot be done intelligently or economically.

The net effect, instead of being a richness of models for evaluation and selective adoption, is anarchy, duplication of effort, excessive demands on the public health sector bureaucracy at all levels and, most importantly, lack of consensus on the purpose of the promoter role and its content. Furthermore, together with the logistical problems which will be discussed below in Section D, this lack of consensus dilutes the value and impact of existing national and regional training curricula; these have their strengths but have not been designed from the position of first defining the functions of the promoter.

The largest area of consensus within the health establishment is that the dominant feature of the promoter role should be preventive, and the curative dimensions should be only marginal. Nurses are more inclined to expand the preventive dimension to include more MCH activities, and sanitarios are inclined to be more flexible on the subject of injections, but all agree that the promoter's pharmacopoeia should be quite narrow.

The contradiction emerges from the discrepancies among this set of perceptions; the real needs of the field, especially the most rural areas; and the perceived needs and priorities of promoters and the communities in which they live and work. Promoters themselves, especially the most active ones, evidenced through every instrument and encounter in this study that their primary concern is to improve their capacity to deliver curative care.

Promoters were asked in several different ways to indicate their own priorities: first, through the views of both active and inactive promoters, what they considered the important parts of their role; second, what they thought their most important activities were; and third, what they felt they needed to do a better job. These are the results:

Promoters' Own Priorities	Most Important Activities	Greatest Needs To Improve Performance
First aid	First aid	More training
Curing illness	Family planning	Medicines
Educating the community	TBC referral	More first aid training
Preventing illness	Vaccination	Professional support
Handling emergencies		

The essentially curative-cum-first aid priorities displayed here do not diverge from community perceptions. Eighty-three percent of the communities surveyed had promoters working in them. Twenty-nine percent did not know what the promoter did, but 63% said he or she gave first aid and primary care.

It is difficult not to come to the conclusion that decision-makers in the public health system and their community-based clientele are in almost polar postures on what a health promoter -- supposedly a crucial broker between that system and that clientele -- should do.

2. The Selection Process

There was little disagreement found in any of the groups interviewed on the issue of how promoters were selected: the role of the community, especially the Community Assembly, was clear, even when it was essentially rubber-stamp activity and reflected certain manipulation by community leaders. This was not seen negatively, but rather as an advantage for the promoter, who would thereby garner more community support. Still, political support alone does not produce an effective promoter and it is obvious that such selections, in the absence of other criteria, are simply counterproductive power plays.

Similarly, throughout the groups interviewed, the sex of the promoters was not generally an issue of controversy: each sex had advantages (men were able to move around more freely under difficult conditions; women inspired more confidence); and suggestions came from a number of sources that assignment of couples might be tried. The fact that, of the randomly selected promoter sample, 62% were male and 38% were female, reflects lack of rigidity in this selection area. There was also consensus that promoters should be married or in stable union and have families (63% were married and tended to have large families, an interesting datum for those interested in family planning); and that they be "responsible" (45% were between ages of 21 and 30, and 35% were between 31 and 40, an age one assumes to be "responsible"). All this consensus did not, nevertheless, produce a consistent promoter profile in reality: the typical promoter in Ancash was a married older male, while in Ica it was a married or unmarried younger female.

Another criterion stated by institutional representatives and reiterated in some published norms, was that promoters have some steady source of income. In reality, as calculated by the proxy of house flooring type, promoters come from the lower socioeconomic strata and tend to be agriculturalists, workers in the informal sector, or housewives, all of which suggests that these are not, in the main, individuals with either large or stable incomes. The implications of this are discussed below.

The selection criterion which implicitly or explicitly stipulates indigenous language capacity (in communities where that is necessary) has been consistently successful across regions. However, the normative expectation of well-established community residence is only imperfectly realized: 35% of promoters had five years or less of residence in their communities; the promoters with fewest years of residence were generally found, as one might expect, primarily in areas of substantial immigration. Although its worth is indisputable, this criterion may be increasingly difficult to sustain.

The promoter characteristic with perhaps the greatest -- and potentially most promising -- implications for the program is the health and educational background of the promoter:

> 28% had some member of their family who also worked in health

44% had worked in health before receiving training as a promoter,
80% were presently continuing in that type of health work,
39% had completed primary school,
20% had some (1-2 years) of secondary school, and
27% had completed secondary education.

First of all, promoters often emerge from some kind of previous involvement in health work, although this is not a selection norm. Second, their prior health experience is in both in the modern and traditional health subsectors; this means that promoters not only often have some experience with some form of "modern" health delivery, but have traditional medical experience as well. The Peruvian public health establishment is unusually open to training traditional practitioners but dubious about their literacy levels and interest. Educational levels of promoters in general are substantially higher than is generally thought, and other data (Davidson, 1981) indicate that traditional practitioners have more literacy than previously believed. It appears that curanderos and other traditional healers could, in fact, be recruited, if the incentives offered were adequate. It also appears that many promoters could conceivably be given access to upward mobility in the public health system, if that system were disposed to foster such mobility.

B. Adequacy of Promoter Training

Institutional ambivalence about the promoter role spills over beyond recruitment and selection, into the area of training. Doctors tend to share a concept which we term "the disposable promoter." Because of perceived high desertion rates, MOH physicians in general appear to think that initial promoter training investments of time and money should be kept low; this minimalist view corresponds to their perception of the promoter as a slightly-trained community member who serves as a health educator, program facilitator resource, and little more. Nurses and sanitarios, as indicated above, do not agree; this suggests that MOH thinking about using nurses as trainers and sanitarios as supervisors make sense. Doctors associated with that training experience should be field experienced and public-health oriented. In general, there seems to be at present little practical or philosophical bonding between most physicians and promoters.

This lack of commitment to substantial training for promoters has produced, since 1975, an almost steady decrease in the duration of the initial promoter training period. The decrease has not been compensated for by follow-up or refresher training; survey results indicated that very few* promoters had received such training, even though a number of doctors said that they thought incremental training with low up-front investment was the soundest financial and pedagogical model. Long courses are indeed impractical from a number of standpoints and the idea of frequent refreshers, especially if they are modular and

* Only 34% of the promoters surveyed who had gotten initial training had gotten more; only 20% had had any explicit refresher training.

are linked to new or expanded program needs and more limited, categorical goals, is excellent. But if these do not occur and there is little or no follow-on supervision, then even a minimal training investment is wasted.

The MOH has produced training schedules and there are basic curricula developed and somewhat in use, but these are overcome by what are essentially problems of systems support. Even the best thought-out curricula crumble under the relentless need to improvise or eliminate subjects, adjust training style, change schedules (usually foreshortening training hours), and substitute trainers at the last minute (see Chapter III-C). Whatever norms may be, however good the curricula, and however firm the plans, supervisors, trainers, lecturers, and students all end up doing training largely on an ad hoc basis. Training materials are provided haphazardly or become available with little advance notice (although excellent equipment and materials exist), and logistical problems often interfere with presentations of programs (e.g., no projector bulbs, no gas, no white drawing paper, no transport for lecturers). In some regions there is little coordination of efforts, nor is there an organized plan to assure the most appropriate use of human and other resources. And, in all regions, planning for training is constrained by funding procedures that are largely determined by the Ministry of Economics and Finance (MEF), which leaves the regional and local levels only tiny "windows" during which they can spend and be assured of getting their money (see Chapter VI). Similar issues, complicated by variability in other-donor financing, affect provision of travel and per diem funds. These funds, in their turn, vary in adequacy from levels that are so low that they act as a discentive, to levels that are so high that they act as "super-incentives"; in the latter case, many promoters come to be trained only, or largely, to earn the emoluments.

As for the quality of the training itself, the MOH has many experienced trainers, who are well aware of the advantages of participatory techniques. However, such individuals are often shifted to other jobs and the new training coordinators have not been prepared to do much beyond traditional, didactic, "one-way" teaching. There is far too much theoretical knowledge given, just for the sake of knowledge, and too little practical knowledge. This is, of course, a function of poor role definition as well as of typical medical proclivities. The practicum concept does appear in curricula and some innovative teaching materials are used, but these approaches, more often than not, succumb to logistically-induced reality, e.g., no gas to take students to field; classes that are too large; and excessive disparity in student quality and level of preparation. Although most students are enthusiatic and eager to learn, unevenness in the national educational product, and together open-endedness of the MOH's educational norms for promoters, result in student bodies with ranges in real educational levels that would discourage the best-trained trainer.

As for the curricula themselves, they are diverse even within regions, to a degree that goes beyond the regional autonomy which is endorsed by the MOH on the basis of imputed epidemiologic and practical variation at these levels. However, there is a chasm between saying there is no need to teach promoters to do thick smears in non-malarious zones and the present curricular anarchy. As things stand now, inconsistent weights are assigned to different subject matters; one region may devote a lot of time to MCH, an adjoining one may do almost nothing.

If nothing else, this reflects the MOH's internal ambivalence toward the role of the promoter in MCH; most promoters say they have been trained in first aid and management of child diarrheas (though knowledge levels could be better), but have been trained only scantily about prenatal vaccination and danger signs during pregnancy. Their view is that they could have a major role in MCH, even when there is a trained TBA in the same community. Similarly, promoters want more training in pharmaceutical management and family planning, areas where the medical establishment is most indisposed to loosen its grip.

Finally, promoters are not trained in information systems, nor given adequate tools (e.g., simple, consistent reporting formats), so that the potential for anarchy expands geometrically. The characteristics and problems of supervision exacerbate factors yet again. If the effectiveness of the promoter system is ever to be evaluated and its net impact on the community measured, then promoters must have such training.

In sum, even if there were to exist what would be ideal -- a standardized core curriculum based on a small, well conceived set of promoter skills, followed by modular add-ons as appropriate -- it would still be hard to maintain curricular consistency even within the same region, until logistical problems and basic systemic issues are resolved.

C. Promoter Activities, Community Acceptability of Promoters, and Responsiveness to Community Health Needs

1. The Promoter's Perspective

In the area of prevention, 81% of promoters indicated that they characteristically gave educational talks, with over two-thirds having given their last talk over one month ago. Judging by other quantitative indicators and qualitative understandings from our case studies, there is good reason to believe that the level of preventive activity by promoters is low. Most indicated environmental sanitation and family planning talks as their most frequent preventive activities.

Over 90% of the promoter sample said they engaged in curative activities: primarily first aid, treating injuries, and managing child diarrheas. A surprising 92% had also attended childbirths; males tended to have done much of this, again to our surprise.

In terms of total promoter activities, 60% said they worked one to three hours per day, and over one-half claimed to be available six to seven days per week. On the basis of observed caseloads, written records, and community utilization data, these figures seem high to us; they probably reflect a desire to indicate more activity, than may actually be the case, with hopes of receiving more financial and logistical support. In any event, we feel that levels of activity tend to be over rather than under-reported.

Promoters refer patients most frequently to Health Centers and are, in fact, three times more likely to refer to a level other than the Health Post. One possible explanation may be that the real or perceived diagnostic and treatment capabilities of Health Posts are not significantly superior to the promoter's own abilities. Furthermore, the Posts are generally open only in the morning and the sanitario is often not a resident of the community; he or she is therefore unavailable for emergency treatment outside regular hours. The most common reason given for promoter referrals is the lack of medicines or inability to provide the appropriate medical expertise.

Promoters themselves clearly emphasize their preference for doing curative activities; their preventive activities (and impact) are presently low, partly because of lack of adequate community support and interest and partly because of lack of institutional support. With proper supervision and supply, there are, nevertheless, large numbers of active promoters (real number unknown) who could participate in such categorical programs as vaccination and oral rehydration campaigns. Their expressed interest in family planning would mark them as a further resource for those activities as well.

2. The Community's Perspective

A little over one-half of the community respondents had gone at least once to a promoter for health problems. Their most common complaints were: colds and influenza, fevers, sick child, infections, and injuries. These responses were consistent across the eight regions, conformed with the promoter responses, and fit well with broad epidemiological profiles. Thirty-two percent said the promoter gave better advice than physicians; in urban areas (another 29%), physician's advice was valued over that of promoters. This suggests some directions for role definition. Community respondents, as indicated at the outset of this section, clearly preferred a curative role for the promoter: medical consultations, provision of medicines, injections, and first aid. They saw the greatest impact of promoter activities as deriving from the availability of emergency treatment, first aid, and vaccinations; they believed these activites were contributing to diminution of child diarrheas, and fewer sick children. At the present state of the art, this is, of course, not measurable.

On the preventive side, only 29% of the community residents interviewed had ever attended a promoter educational talk; the high of 45% found in Puno was probably due to the cohesiveness and strong internal leadership in native Aymara and Quechua communities. Nineteen percent spontaneously mentioned having listened to talks on family planning.

The curative aspects of promoter activities clearly fit community-perceived demands in virtually all areas. However, effectiveness in prevention is more likely to be related to promoters' ability to at least symptomatically treat diseases. Overall community support appears to be poor, with very few exceptions, and interest is even lower when it comes to preventive activities. In terms of local formal support organizations, health committees and community pharmacies are generally non-existent or non-functional.

Community perceptions of promoter effectiveness were most frequently predicated on the perception, shared by some quarters of the public health system itself, that promoters must be having some positive impact, simply because there were no other easily accessible health care alternatives. Nevertheless, in terms of the actual health needs of Peruvian rural and marginal-urban residents, promoter effectiveness or impact appears to be minimal. Even in curative activities, especially first aid, the promoter serves only a small portion of the MOH target population; medical impact on the population served is still more marginal. Promoters use primarily analgesics and sub-therapeutic doses of antibiotics; there may be some placebo effect, but the basic activity is minimal and symptomatic. In sum, except for first aid and wound care, promoters are doing very little that is efficacious in a curative sense.

Data from community interviews indicate that there is great variability in referrals, believed by the public health establishment (and normatively stated) to be a major function of the promoter. True emergency referrals are rare, largely because of the personal financial cost to the promoter of accompanying such patients to the appropriate health facility. Preventive referral activites, for example, for prenatal care, are hard to track because referral data are not customarily maintained at the local level in any consistent way. Referral cards, which could contribute to knowledge about whether patients typically follow through on preventive referrals, are not generally used. Whether patients follow preventive referrals also depends on whether the services provided at upper care levels are seen by clients as worth the effort, something beyond the promoter's control.

Nor is there measurable evidence of effectiveness on a global scale. More than eight years of promoter activities do not appear to be associated with change in rural sanitation, rates of maternal and child mortality, or incidence of injectious diseases. Unless promoters can combine specific diagnoses with specific treatments, there is little sense in expanding the available formulary, since scientific medicine based on specific infectious agents is not being practiced, even at Health Posts and probably not at most Health Centers. As for preventive care, without either community or system support, there is only a modest possibilty that meaningful improvements, induced by promoters, can occur in the near future.

D. Adequacy of Program Support: Supervision, Logistics, and Incentives

1. Supervision

There may be little justification for training new promoters (and, in some respects, in re-training existing promoters) if there is no logistic or supervisory system to support them. There has been considerable activity in supervisory training, and several conferences have been held at different levels of the MOH staff involved in supervision. These are well attended because professionals justifiably enjoy any opportunity for continuing education. Stil, we wonder about the timeliness and ultimate utility of these if there are to be no resources for actually doing supervision, i.e., no travel funds, gas and per diems, for promoters to get to and from training sessions or make regular reporting and re-stocking visits, or for supervisors to get to the field.

Supervision suffers not only from the real financial and accounting problems that afflict the whole sector, but from attitudinal, if not philosophical, problems as well. Supervision is a low priority for most of the physicians who dominate the decision-making strata in the field. Given a choice, a regional or area doctor is likely to choose to spend the limited funds available on his hospital and to assume that outer care levels will automatically profit thereby; the promoter, perceived as part of the community and not as part of the public health system itself, is beyond the range of medical or fiscal concern.

Thus, the ultimate responsibility for training and supervision rests with graduate nurse-supervisors and trainers, at least as things are presently constituted in the field. Most of these are capable, highly motivated, and committed to the promoter concept, but at least some regions lack the upper-level commitment, logistical support, planning, overall coordination, and direction that could glue the regional system together. While the following statements do not apply to all regions, they apply to enough regions to validate presenting them here. There has been minimal supervision and slack logistical support since 1982, so that promoter programs have suffered greatly, utilization has decreased, dropouts have increased, quality of promoting activities and corresponding community support has fallen off, and some programs are in frank decay. Supervision in most areas is at best haphazard, and sometimes even contradictory. Promoters seem to feel almost abandoned by the MOH and are left to sporadic and uncoordinated efforts by PVOs and other donors. In at least one region, there is a palpable effort at higher bureaucratic levels to discredit and impede health promoter programs; promoters are viewed by the medical profession in some quarters as only ill-trained curanderos with an official stamp of approval. And, in some cases, auxiliary nurses and even sanitarios view promoters as actual or potential competition. Finally, supervisors change often, the more so the higher the position, so that keeping qualified supervisory personnel in the field is even more difficult than before, due to recent changes in remuneration scales which favor urban health workers.

Most of the supervision of health promoters that does take place is done by the sanitarios from Health Posts, 22% of promoters get supervisory visits from no one. The nature of the supervision that does get done is often counter- or non-productive. Promoters are primarily asked about what they are doing but are not observed at length in action, and very few supervisory visits are used to teach new skills or correct errors.

The information system, which might substitute at least partially for lack of personal supervision, is effectively non-functional. Eighty percent of promoters do keep some sort of records, but almost all of this is simply patient registration in notebooks of their own format, with almost no record of preventive activities; when these are recorded, there is either under- or over-reporting. Data collection for administrative functions related to promoters is not standardized even within regions. In some places, promoter data are swallowed up in excessively-aggregated primary care data; useful data related to infectious diseases, medications and dosages used, and fees collected are either not recorded or reported from the local level. Some promoters (and sanitarios) spend hours recording data and filling out forms which are not used, while some regions, areas, and districts try very hard to collect and aggregate data which then have no channel for flow into greater utilization by the public health system.

2. Logistics

The logistics and supply system which apparently existed three years ago in the MOH, and is reported to have been functional, is effectively gone. Each promoter or provider must fend for him- or herself to get medicines, supplies, or equipment maintenance, with only a few sporadic exceptions. Health Posts and even Health Centers and hospitals are not themselves adequately supplied or serviced, so that their capacity to support outreach personnel is constrained, often severely, even when the commitment to do so exists. The elaborate, often well-conceived regional plans for training and supervision and for increasing utilization in a system where such rates seem dismally low, run aground on lack of transportation and supplies. The impressive amounts of equipment available throughout the system may be unused because of lack of bulbs, kerosene, gasoline, or repair.

Drug supply is haphazard as well. There is not, nor can there be at present, any system-wide standardization. Each promoter buys what he or she deems important, with little direction from supervisors, and depends on ingenuity rather than on a working logistics system based in Health Posts or Health Centers. Promoters buy most of the medications they use at private pharmacies, with average expenditures of $/15,000 a month. Some promoters have almost no drugs. Others have high-powered medications which they really do not know how to handle. Others do not use what they have, primarily those basic medicines supplied initially and/or erratically by the MOH. Even the fundamental disinfectants for wound care are in short supply. Knowledge of appropriate pharmaceutical use is minimal, as promoters themselves say, so that the net effect on communities of this sort of medical care may be close to nil; promoters thus become no more than distributors of aspirin, antidiarrheals, and injections on demand. This excludes the two types of medicines most suited to the epidemiological needs of communities: ORS and anti-malarials. Only 83 of the 284 promoters lived in a place where there was a botiquin comunal.

Finally, sporadic supplies of family planning commodities threaten to weaken such programs just as demand for them is growing. The promoter can have an important facilitative and distributive role here, if this incipient problem does not become yet another inherent flaw in the logistics system

The medical establishment does not easily relinquish control over activities which it considers its appropriate and exclusive domain. Pharmaceuticals and contraceptives, which indisputedly can bear risks and unanticipated side-effects, constitute an area where the medical establishment has been persistently cautious. Ironically, until recently most pharmaceuticals (including what are termed "listed drugs" in the United States) have typically been available on demand for over-the-counter purchase in most LDCs. This, together with the marketing pressure exerted by drug manufacturers and distributors, has created a demand for modern pharmaceuticals by even the poorest clients. Until the promoter can respond to this demand as most urgent community needs indicate, then his role as change agent in the area of preventive care will be severely constrained.

CHAPTER VIII. RECOMMENDATIONS

A. Summary

As part of the health promoter evaluation in Peru, case studies were carried out in a sample of four of the 17 health regions in Peru to assess the overall performance and status of health promoters in each of the four regions. An evaluation of health promoter training programs was also done. These studies were carried out February 8-17 and March 18-26, 1984, in the regions of Ica, Piura-Tumbes, Cuzco, and Puno. In the course of the study, 27 health promoters were interviewed in their communities. Health Posts, Health Centers, hospitals, and regional administrative centers were also visited to assess their involvement in the promoter program. Some members of international donor organizations were also interviewed, and three health promoter training courses were attended.

Health promoters have been trained in Peru since 1925, but the Peruvian government's major efforts in health promoter programs have mainly occurred since the mid-1970s, when it was decided to try to increase the (largely rural) population's access to primary health care services. Since that time, about 5,000 health promoters have been trained in Peru. The object of this study was to see what they are doing and what their impact has been on health status.

In the last six months of 1983, teams from the Directorate of Maternal/Child Health and Population (DSMIP) of the Peruvian Ministry of Health went out to most of the 17 health regions to evaluate the coverage of MCH programs. Their results were disappointing: they found that prenatal care had only about 7-12% coverage, well-child care 8-9% coverage, vaccinations 15-23% coverage, and family planning less than 1% coverage of the population. The findings from the present study confirm these observations and indicate that, despite the placement of 5,000 health promoters in the field, there has been little (if any) change in health status.

The main reasons for the failure to date of the health promoter system are: lack of supervision, absence of a logistic support system for the promoters, and absence of a functioning health infrastructure into which the promoters can be integrated. In all the four regions studied, it was noted that there had been a deterioration in the situation of the health promoters over the past two years. This coincided with the worsening of Peru's general economic situation. Personnel in the health sector must increasingly be more concerned with personal economic survival than with the quality of services. In the past two years, supervision has nearly disappeared; resupply of medicines and supplies to the promoters has dwindled to a trickle; and there has been a general drop in promoter utilization in most areas. With some

exceptions, there has also been a decrease in community support, likely because most communities have not been able to perceive major utility to them in the promoter's work as it is now generally performed.

Elaborate and impressive supervisory and training plans for promoter programs have been developed, a plethora of training courses for supervisors has been held at various levels, but the health infrastructure does not function for the promoter. While 20-page, minutely-detailed training curricula can get published, the promoter cannot be resupplied with a cheap mimeographed reporting form. Beautifully equipped new hospitals or health centers are unable to supply simple analgesics to the promoters or to themselves. And whereas Land Rovers are available for supervisory trips, there is no budget for gasoline.

At the end of each of the individual regional case studies, there are listed observations or conclusions specific to that particular region; of these observations are, of course, relevant to other many regions as well. The evaluation of the health promoter training programs includes a lengthy section of conclusions and recommendations related specifically to training programs. Some more general conclusions and recommendations related to the promoter program as a whole follow:

B. Conclusions

1. About 5,000 health promoters have been trained in Peru since the mid-1970s. About 2,000 of these were trained in the four regions included in these case studies.

2. Between 10% and 50% of these trained promoters, varying by region, have already abandoned their work as promoters.

3. The promoters' present utilization is low; most average 10 to 40 health-related activities per month.

4. Most of these activities are in adult curative medicine, although in Ica there is some activity in family planning and other preventive efforts.

5. There is wide variation in the utilization of individual promoters, as well as considerable variation in how much preventive versus curative work each promoter does. The motivation of each individual promoter is important, especially so since the promoters are largely unsupervised and left to their own devices to succeed or fail.

6. The most successful and motivated promoters are the ones who are most likely to "move upward" to paid jobs in health.

7. With the exception of the family planning involvement of the Ica promoters, promoters in general have not done much in maternal and child health -- the area where the greatest possibilities for preventive care exist.

8. Although the amount of community support for promoters varies, in general it has been poor. This lack of support reflects the dearth of supervision in the health promoter program.

9. Logistic support for the promoters has been uniformly poor, with the exception of a few areas such as Catacoas (Piura) and Juli (Puno), where logistic support has come from religious organizations completely outside the Ministry of Health structure. At present the Ministry is not even able to supply its hospitals and health centers with medicines and materials, let alone the promoters.

10. Supervision of the promoters in the four regions studied is almost non-existent; less than 10% of the supervisory visits programmed were being done at the time of the study. Although vehicles do not seem to be lacking, there are no funds budgeted for gasoline or other travel expenses.

11. Both supervision and logistical support for promoters was better two or three years ago. The promoters' logbooks in all four regions indicated higher utilization two years ago, probably because they had been more recently trained, were being supplied with medicines, and were being supervised more often.

12. Because of the lack of supervision and logistic support, it is likely that the health promoter program will disappear in some areas.

13. There is no standardization in the data reported by the promoters, so evaluation is difficult. For example, the collection of financial data seems paramount in Piura, but is totally ignored in Puno. Each region collects different promoter data. Because of inconsistent data collection, there is both underreporting and over-reporting; as was observed in the field, the latter especially appears significant in the reporting of preventive activities.

14. There are no guidelines for what promoters should charge for their services, so there is a wide range in promoter fees, including exorbitant fees in some regions. The issue of promoter financing is becoming more important as the economy declines. A government stipend or salary for the promoters has been demanded by one faction and is an issue of great controversy. In Puno, the promoters have formed a union.

15. The four case studies confirmed the 1983 DSMIP findings. Promoters are in fact serving only a small portion (less than 19%) of their target population; since for the most part they have been only marginally involved in preventive programs, they have had almost no identifiable impact on health status. Their curative efforts have been mostly "band-aid medicine," but without band-aids, and the empiric curative medicine practiced by promoters can have little positive effect on the health status of their communities.

16. There is very little organization or consistency in the medicines the promoters possess and/or use. Some promoters have almost no medications; others have an old supply of many medicines they have either forgotten how to use or are afraid have expired; still others are using exotic and expensive medications they have bought on their own. Very few promoters use oral rehydration salts.

17. Basic training and refresher courses for promoters are carried out in a very haphazard way; a few promoters seem to get frequent courses, while others never get any continuing education.

18. If promoter programs continue to deteriorate, their untimely demise may actually have a negative effect on health status: communities may be much less likely to accept future programs after having seen their efforts wasted this time.

19. New promoters are still being trained and put out in the field despite:

a. the lack of any policy on just what promoters should be doing.
b. the inadequacy of the formal health system, which is unable to provide supervision or logistic support for the promoters;
c. the lack of managerial capacity to handle promoter programs at the national and regional levels;
d. the absence of an infrastructure capable of supporting the promoters with medicines, supplies, regular continuing education, etc.

C. Recommendations

1. The health promoter program needs consolidation rather than expansion.

2. The best possible effort should be made to create an infrastructure for promoters. The people who have experience with promoter programs should be used to revive the programs, if it is decided that health promoters are really wanted. It is imperative that there be regular organized supervision and a simple functioning logistics system to supply basic medicines and medical materials.

3. Incentives are needed to keep experienced supervisory people working in rural areas. The Ministry did just the opposite in late 1983, when it created financial incentives for health professionals to work in the cities, a policy which the MOH may want to reconsider.

4. The Ministry of Health and the regions need to decide just what the principal functions of promoters should be. The promoter role can be defined nationally according to a basic, minimal set of job parameters which will be common to all promoters. Clear definition of promoter role and functions can help to bring consistency to a wildly inconsistent outreach system, provide a better base for supervision and evaluation, and produce economies where haphazard variety has led to excessive costs.

5. Once the promoter's functions are more precisely defined, training and continuing education, as well as supervision, can be more efficiently adapted to practical needs.

6. Training curricula should reflect not only national norms but specific local needs. Epidemiologically-similar areas (regions or hospital areas) can add specific, locally-needed practical skills to a basic curriculum in modular fashion; e.g., a region or area identified as malarious can add a day of training in malaria surveillance, case reporting, thick smears, and treatment. The promoter's skill base can be expanded incrementally through continuing education predicated on vertical program or campaign needs (e.g., tuberculosis, immunization campaigns, ORS/growth monitoring/child diarrhea management, etc.) or special local problems such as natural diseases or epidemics.

7. Curative medicine should not be left out of curricula, but should be included,and even emphasized, when it is a real need for the promoter (e.g., in remote communities with little access to the formal care system).

8. If curative medicine is to be included in the promoter's functions, it should be considered a means to gain the confidence of the community so that effective preventive health measures may be encouraged.

9. As a corollary to 18, if promoters are to do curative medicine, they should be able to do it effectively; in a remote area, training would include the use of antibiotics. In fact, we recommend consideration of two basic promoter types, differentiated by the sole criterion of distance/time/access to modern health care. Promoters in areas of difficult access would receive a larger kit, more training in its use, and a broader curative mandate. This difference would, nonetheless, be encompassed in the design of the basic set of national norms discussed above.

10. Promoters should be used more effectively and actively in such categorical programs as tuberculosis control, family planning, malaria control, vaccinations, and environmental sanitation, but not in all of them at once. In order to encourage pride in his or her work, the promoter should be specifically trained in each individual program on a modular basis and take a more active role than is permitted at present.

11. Efforts should be made to re-incorporate maternal/child health into the promoter's priorities, if not in place of adult curative medicine, at least on a par with it. It is in maternal/child health that greatest preventive impact can be achieved.*

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* We understand that it is the MOH's intent to entrust the bulk of MCH responsibility at the community level to the Trained Traditional Birth Attendant. This makes eminent sense, but the complete exclusion of the promoter from this crucial area seems unduly rigid and may be counterproductive. One of the most important mass communications concepts is reinforcement through repetition and multiple channels of information; promoters and TBAs can mutually strengthen each other's impact and if role and referral content are well managed, there need be no conflict.

12. The promoter courses should contain much less theoretical and much more practical material; they should rely far more on participatory training than on didactic lectures. The teaching should be competency based, and adequate training materials should be planned well in advance of any course. Training should be done with smaller student groups if possible.

13. If the effectiveness of the promoter system is to be evaluated, and its net effect on the community to be measured, the promoter must be trained in information systems and reporting. There should be national standardization of data collected by promoters to allow for comparison. At the very least, some epidemiological and standard utilization reporting should be included.

14. There should be a functioning supervisory system to make the training courses effective. This system would ideally include a specific curriculum for the promoter to be taught by the supervisors. Without continuing education and ongoing learning through supervision, promoter training courses are a waste of time and resources.

15. Following from 14, the length of the promoter training course is not so important as the follow-up and supervision that occurs after the initial and/or refresher courses. Given the low utilization of the promoters, there is little opportunity to maintain many skills unless they are supervised. The basic promoter courses could be only 2 to 3 weeks if there were follow-up afterwards tailored to specific needs in each community. This approach would mean smaller groups to be trained after the initial 2 to 3 weeks. Because of logistic difficulties, aiming at a 2-to 3-week course may in fact require a longer time "on paper."

16. Some Ministry of Health or governmental funds should be committed to support supervision for promoters, even if it is only for gasoline specifically earmarked for promoter supervision. Depending on foreign donors for these funds means that supervision stops when the funds run out.

17. Courses for training supervisors are not really useful unless there are resources available to actually do the supervision. It makes little sense to even hold these courses unless they are coordinated with efforts to provide logistic support for supervision. Unless there is some means to actually do promoter supervision, courses teaching supervisors how to supervise should be suspended as a waste of human resources. and money.

18. Unless the Ministry and the regions show some willingness to do whatever is necessary to implement an on-site program of supervision for health promoters, as well as to take steps toward re-instituting a logistics system for the promoters, the generation of new health promoters should be discontinued.

19. There are many human and material resources available in Peru in the form of (a) people with much experience in promoter training and/or supervision, and (b) expensive teaching materials and medical equipment. These resources are both Peruvian and from international donor organizations. They all should be better coordinated and used to foster more creative alternatives for the health promoter program. Such coordination could strengthen promoter training courses, supervision, and logistics systems, instead of continuing the present, sometimes competitive situation.

20. If promoter training courses are to be supported by per diems, these should be adequate. The financing system for such courses needs to be administratively tightened up so that materials, transportation, and per diems can be assured.

D. Conclusions and Recommendations Based on an Analysis of the Economic and Financial Context

1. Summary

At all levels in the health system, and certainly at the lowest levels, health workers complain of lack of support. Promoters would like salaries and more consistent provision of medicines and other supplies. Health Center and Health Post staff need more supplies and travel allowances if they are to adequately supervise the lower levels. The area and regional levels complain of the need for greater budgetary allocations and more timely delivery of financial and material resources. It seems likely that these deficiences contribute directly to the low productivity observed at all levels in the system and verified at the promoter level by surveys and case studies.

These financial and material deficiencies appear to have two causes. First, the administrative and management systems do not currently deliver the resources where they are needed when they are needed. (For example, MOH money for travel allowances is rarely if ever available in the areas and regions during the second half of the month.) Second, it is also clear that real financial resource constraints limit the Ministry of Health's ability to support with supplies and services the health service delivery infrastructure that is already in place. Inadequacies in the current level of support results in low levels of productivity and cost-effectiveness.

2. Conclusions

a. The Government of Peru makes a much greater health effort than is commonly acknowledged. When one examines only the government's operating budget and subtracts all debt amortization and interest payments (for inclusion under the Ministry of Economy and Finance), health accounts for 7-8 % of total operating allocations. Given the current political and economic context, this level is acceptable and, in any case, it appears unlikely that the health sector can be assigned a larger share of the budget.

b. The Ministry of Health's budget has increased from 37 billion soles to 472 billion soles since 1980. Most of this increase is due to the collapse of the purchasing power of the sole. The Ministry's purchasing power in terms of current US dollars increased rapidly in 1981 and 1982 and then declined almost as rapidly in 1983 and 1984. As a result, the Ministry's 1984 budget is only 5% greater than its 1980 budget and, if the decrease in purchasing power of the dollar is considered, the overall purchasing power of the Ministry has certainly decreased. Meanwhile, its target population has probably increased by more than 10%.

Reliable figures were not readily available on changes in the size of the Ministry of Health's physical and human infrastructure; it is, however, clear that this infrastructure has grown, with many foreign donors supporting development costs, but insisting that the Ministry bear most recurrent costs. This fact, combined with the stagnant or decreasing purchasing power of the budget, is one underlying cause of the chronic logistics and management support problems which now characterize the health system.

c. During the period 1980-1984, the Ministry of Health budget has seen a very dramatic shift in financial resources away from the purchase of supplies and services and towards the payment of salaries. In 1981, for every 1,000 soles budgeted for salaries, 613 soles were budgeted for supplies and services. In 1984, for every 1,000 soles budgeted for salaries, only 351 soles were budgeted for supplies and services. Considering that salaries have almost certainly increased less rapidly than the cost of medicines and medical supplies, one can only infer that the average MOH health worker today has at his disposal less than 50% of the material resources that were available to him in 1980. Budget allocations for non-personnel expenditures are decreasing as a proportion of the total at a very dramatic rate. In fact, the budgetary allocation expressed in current US dollars for materials and supplies now stands at less than 85% of 1980's actual expenditure for these items.

d. The Ministry of Health, like the government, overspends its budget, due to inflation which makes it necessary to adjust both salary and other line items. In 1981 and 1982, priority was given to salary adjustments; budgets for supplies and materials, services, travel and travel allowances, and maintenance and repair were underspent by 9%, 40%, 26%, and 64%, respectively. In 1982, 75% of actual MOH expenditures was for salaries; a similar shift in the execution of the 1984 budget would push the proportion spent on salaries into the 80-85% range, (an estimate that many regional and Area Hospitalaria administrative personnel feel may be conservative). The result will be that current chronic shortages will become worse and the productivity of the health system will diminish further in quality and quantity.

e. One relatively bright spot is the increase in internal income generated from fees collected at the Health Center and Hospital Area levels. Actual collections are usually more than double projected collections; in 1982, they sustained 37% of total expenditures for supplies and services, compared to 28% in 1980.

The lowest level in the health system which has financial personnel is the area hospital. Collections lower down in the system must be turned in to the area level, except for a portion which may be used to maintain a small petty cash (bolsa chica) fund at the Health Center; the area hospital staff determine how the bulk of the collected funds will be spent. There appears to be no formal relation between the amount of funds collected and the quantity of funds available to the collecting institution; it is quite possible that Health Centers may be subsidizing the area hospitals.

f. Data on the distribution of health expenditures among the various health institutions do not appear to be readily accessible. It is widely believed that only a small fraction of the total Ministry budget is expended at the Health Center and lower levels. One study reportedly found that only 7% of a region's budget was expended on these levels. Given the difficult financial situation faced by all levels in the health system, major shifts in the expenditure pattern towards the primary health care levels will require that primary health care receive priority consideration as a matter of policy.

g. In conclusion, this background study has found that serious financial constraints will prevent the development of a promoter program characterized by adequate levels of productivity. It will not be possible to successfully deal with the promoter or even the primary health care level of the health system without addressing policy issues and management systems on a comprehensive systems basis for the Ministry of Health as a whole.

The financial implications of improved management systems and increased health system productivity would entail two shifts in the structure of the Ministry of Health budget. First, there would be a shift of expenditures away from renumerations and towards expenditures for supplies and services. Second, there would be a shift of resources towards lower levels in the health system. This shift would not -- and should not -- come from a decrease in resources spent at higher levels, but rather from a more rapid rate of growth in expenditures at the Health Center and lower levels in the system. Greater expenditures at these levels should eventually result in lower demand for more expensive services at higher levels.

3. Recommendations Based on Financial Analysis

a. All development activities in the Ministry of Health should be directed towards increasing the cost-effectiveness of the existing health service delivery infrastructure. The improved management support systems (logistics, finance, personnel, supervision training, and information) that must be developed for improved productivity will require 10 or more calendar years of donor and Ministry effort to fully institutionalize.

b. All current health service delivery infrastructure expansion should cease, until improved financial and management support can be developed and the productivity of current infrastructure (buildings, equipment, and personnel) raised to adequate levels.

c. The financial feasibility of all present and future health projects funded by loans at interest rates which approach those in the commercial sector should be throughly evaluated by an independently-funded organization, since these projects will likely draw resources away from other, potentially more cost-effective, activities.

d. All fee income should remain with and be utilized by the collecting institution in order to provide an incentive to the institution to collect the fees, and to assure that fee-payers understand that the money remains in their communities.

e. Given the difficult economic situation in Peru, it is not unrealistic for promoters to want financial incentive for their work, and certainly some reimbursement for out-of-pocket costs. Hardly any communities have provided financial rewards for their promoters, although this would be desirable and quite feasible if communities could perceive a larger preventive or curative benefit from promoter activities. At the same time, it is not likely, given current demands for fiscal austerity, that the MOH can or would commit itself to salaries for (at least) 5,000 promoters. A rotating drug fund that would allow a margin of profit for the promoter (with adjustments for inflation), together with standarized, appropriate fees for basic curative services (e.g., first aid and authorized injections), would finance the promoter's curative activity. However, an adequate pharmaceutical logistics system needs to be operative first.

We suggest a two-phase strategy. The first phase would initiate the management improvements and internal budgetary reallocations that would produce functional supervisory, logistics, and maintenance systems to support the promoter program. During this phase, the MOH would produce job descriptions for each level of primary health care delivery (the promoter's job would include no more than six preventive tasks); come to a determination of the value of these tasks to the system and corresponding level of financial stimulus for their performance; and identify potential areas of savings, including corrections to patterns of under-expenditures for supplies and services. The hypothesis underlying this phase would be that, if promoters are well supported by the public health system, they can a) provide curative goods and services that community members are prepared to pay for and b) provide preventive services that the public health system is prepared to pay for. An additional assumption is that promoters who are well supported by the public health system in all other ways, including support for basic curative, profit- and fee-generated activities, will be less inclined to press for salaries.

The second phase would entail the institutionalization of improvements in management systems. The hypothesis underlying this phase is that a) cost-effective functioning and budgetary rationalization would be producing some savings and increased allocations to management and support systems and b) a well-supported promoter could actually produce a preventive health impact which would justify reimbursement by a grateful government.

SELECTED REFERENCES

Agency for International Development. COUNTRY DEVELOPMENT STRATEGY STATEMENT FY 1986: PERU. Washington, D.C. January 1984.

--------. KOREA HEALTH DEMONSTRATION PROJECT. Project Impact Evaluation Report No. 36. July 1982.

--------. THE VICOS EXPERIMENT: A STUDY OF THE IMPACTS OF THE CORNELL -PERU PROJECT IN A HIGHLAND COMMUNITY. Evaluation Special Study No. 7. April 1982.

--------. EFFECTIVE INSTITUTION BUILDING: A GUIDE FOR PROJECT DESIGNERS AND PROJECT MANAGERS BASED ON LESSONS LEARNED FROM THE AID PORTOFOLIO. Program Evaluation Discussion Paper No. 11. March 1982.

--------. PERU: CARE OPG WATER HEALTH SERVICES PROJECT. Project Impact Evaluation Report No. 24. October 1981.

--------. INTEGRATED HEALTH AND FAMILY PLANNING: PERU PROJECT PAPER (Project Number: 527-9230). Washington, D.C. April 1981.

--------. RURAL WATER SYSTEMS AND ENVIRONMENTAL SANITATION: PERU PROJECT PAPER (Project Number: 527-0221). Washington, D.C. September 1980.

--------. PERU PROJECT PAPER: EXTENSION OF INTEGRATED PRIMARY HEALTH (Project Number: 527-0219). Washington, D.C. September 1979.

--------. REACHING THE RURAL POOR: INDIGENOUS HEALTH PRACTITIONS ARE THERE ALREADY. Program Evaluation Discussion Paper No. 1. March 1979.

J. S. Akin, C.C. Griffin, D.M. Guilkey, and B. M. Popkin. THE DEMAND FOR PRIMARY HEALTH CARE SERVICES IN LOW INCOME COUNTRIES: A REVIEW AND A CASE STUDY. Chapel Hill, North Carolina: University of North Carolina, Carolina Population Center. 1982.

L. Altobelli. TRIP REPORT AREQUIPA-PUNO, 9-11 November 1983. Lima: Westinghouse Health Systems.

--------. STATUS OF HUMAN RESOURCE DEVELOPMENT FOR PRIMARY HEALTH CARE, PERU. Lima: Westinghouse Health Systems. 10 December 1983.

J. Bates, J. Burns, P. Cross, G. Gereffi, C. Keaty, and P. Prentice. INVESTIGATION OF HEALTH SERVICE DELIVERY IN THREE ELEMENTS OF THE PERUVIAN PRIVATE SECTOR, VOLUMES I AND II. Boston: Management Sciences for Health (MSH). November 1983.

J. Bates and P. Cross. MANAGEMENT CONSULTANCY REPORT FOR THE EXTENSION OF COVERAGE OF INTEGRATED PRIMARY HEALTH CARE: PROJECT NUMBER 522-0219. Boston: Management Sciences for Health. 14 April-27 June 1980.

J. A. Brim and D. H. Spain. RESEARCH DESIGN IN ANTHROPOLOGY: PARADIGMS AND PRAGMATICS IN THE TESTING OF HYPOTHESES. New York: Holt, Rinehart and Winston. 1974.

J. Castello C. SEMINARIO-TALLER: PROPOSICION DE MEDIDAS TECNICO-ADMINISTRATIVAS ESPECIFICAS PARA LA COORDINACION DE LOS PROGRAMAS DE SALUD, APOYADOS POR PROYECTOS DE COOPERACION INTERNACIONAL: DESARROLLO DE RECURSOS HUMANOS. Lima. April 1984.

--------. PROCESO DE CONCEPTUALIZACION DE LA ATENCION PRIMARIA DE SALUD. Escuela de Salud Pública del Perú. N.D.

F. D. Colburn. GUATEMALA'S RURAL HEALTH PARAPROFESSIONALS. Ithaca: Cornell University Rural Development Committee. Special Series on Paraprofessionals. 1981.

I. Cornejo-Rosello D. UN MODELO PERUANO DE LA (TECNOLOGIA APROPIADA EN SALUD): ATENCION PRIMARIA DE SALUD EN LA REGION DE SALUD ORDEPUNO. Paper presented at Seminar-Workshop on Appropriate Technology in Health. Juliaca, Puno, Perú: Area Hospitalaria No. 2. 1981.

S. Cosminsky. Cross-Cultural Perspectives on Midwifery. IN MEDICAL ANTHROPOLOGY. F. F. Grollig and H. B. Haley, eds. The Hague: Mouton. 1976.

H. Creed Kanashiro and T. Supervielle. REPORT OF ACTIVITIES IN GROWTH MONITORING AND NUTRITION EDUCATION AND THEIR INTEGRATION IN THE PROGRAM OF PRIMARY HEALTH CARE OF THE MINISTRY OF HEALTH. Lima: USAID. March 1984.

M. E. Dalmat, N. C. Lee, and K. R. O'Reilly. EDUCATION (CEPE): TRIP REPORT. Nairobi, Kenya, October 20-November 13, 1982.

J. Davidson. THE EVALUATION OF THE EFFECTIVENESS OF THE PERUVIAN MIDWIFE TRAINING PROGRAM. Lima: USAID. 1983a.

--------. PRIVATE SECTOR CONTRIBUTIONS TO HEALTH CARE IN PERU. Lima: USAID. 1983b.

P. Doughty. HUAYLAS: AN ANDEAN DISTRICT IN SEARCH OF PROGRESS. Ithaca: Cornell University Press. 1968.

--------. Behind the Back of the City: Provincial Life in Lima, Peru. IN PEASANTS IN CITIES: READINGS IN THE ANTHROPOLOGY OF URBANIZATION. W. Mangin, ed. Boston: Houghton Mifflin. 1970.

--------. E. Burleigh, and M. Painter. PERU: AN EVALUATION OF PL-480 TITLE II FOOD ASSISTANCE. Washington, D.C.: Agency for International Development. September 1983.

G. J. Escobar. SOCIAL AND CULTURAL FACTORS AFFECTING INFANTILE DIARRHEA IN LIMA, PERU. Thesis, Yale University School of Medicine. May 1982.

Escuela de Administración de Negocios para Graduados (ESAN). LA ADMINISTRACION DE LOS SERVICIOS DE ATENCION MATERNO INFANTIL Y POBLACION EN LIMA METROPOLITANA. Lima. October 1982.

M. J. Esman, R. Colle, N. Uphoff, and E. Taylor. PARAPROFESSIONALS IN RURAL DEVELOPMENT. Special Series on Paraprofessionals. Ithaca: Cornell University Rural Development Committee. December 1980.

R. M. Fairbanks. CONSULTANT'S REPORT ON SUPERVISION SYSTEMS, PRIMARY HEALTH CARE PROJECTS, MOH, PERU. Lima: Westinghouse Health Systems. 16 September-9 December 1983.

J. Garcia Nuñez. INFORME SOBRE SISTEMAS DE INFORMACION, MINISTERIO DE SALUD, PERU. Septiembre 1-Diciembre 31, 1983. Lima: Westinghouse/ AID. (Contract C-3024).

R. E. Hall. THE VILLAGE HEALTH WORKER APPROACH TO RURAL HEALTH CARE: THE CASE OF SENEGAL. Special Series on Paraprofessionals. Ithaca: Cornell University. Rural Development Committee. June 1981.

P. F. Harrison. TO BEAR A CHILD. MEANINGS AND STRATEGIES IN RURAL EL SALVADOR. Ph.D. dissertation. Catholic University of America. 1983.

--------. FEMALE REPRODUCTIVE LIFE IN RURAL PANAMA. Panama: USAID. 1978.

--------. THE SOCIAL AND CULTURAL CONTEXT OF HEALTH DELIVERY IN RURAL EL SALVADOR: IMPLICATIONS FOR PROGRAMMING. USAID: San Salvador. 1976.

F. A. Hartman, C. Tobón Niebles, and J. A. Bates. CONSULTANTS' REPORT ON "EXTENSION DE SALUD PRIMARIA INTEGRAL." USAID/Peru. 7-16 January 1980.

Instituto Nacional de Planificación. DIAGNOSTICO SOCIO-ECONOMICO DEL DEPARTAMENTO DE HUANUCO. Huánuco: Oficina Departmental. September 1983.

M. Lajo Lazo. ALTERNATIVA AGRARIA Y ALIMENTARIA: DIAGNOSTICO Y PROPUESTA PARA EL PERU. Piura, Perú: Centro de Investigación y Promoción del Campesinato (CIPCA). April 1983.

D. Landy. Role Adaptation: Traditional Curers Under the Impact of Western Medicine. IN CULTURE, DISEASE, AND HEALING: STUDIES IN MEDICAL ANTHROPOLOGY. New York: Macmillan Publishing Company. 1977.

R. LeBow, D. McCarthy, and P. Cross. PROJECT EVALUATION SUMMARY SPECIFIC TO THE RURAL HEALTH DELIVERY SYSTEM (SBS) IN THE DOMINICAN REPUBLIC, HEALTH SECTOR LOANS I AND II: EVALUATION AND RECOMMENDATIONS Boston: Management Sciences for Health (MSH). May 1983.

E. C. Long and A. Viau D. Health Care Extension Using Medical Auxiliaries in Guatemala. LANCET 1 (7845-7857):127-130. 1974.

D. W. MacCorquodale. Primary Health Care in the Dominican Republic: A Study of Health Worker Effectiveness. JOURNAL OF TROPICAL MEDICINE AND HYGIENE 85:251-254. 1982.

Management Sciences for Health. ANEXO II: GUIA PARA EL ADIESTRAMIENTO DE TRABAJADORES DE SALUD UBICADOS EN LA COMUNIDAD EN ACTIVIDADES RELACIONADAS CON SUMINISTROS. Boston. 1980.

Medicina Natural Popular. ENFERMEDADES DE LAS VIAS DIGESTIVAS. TOMO I: LA DIARREA Y SU TRATAMIENTO CON PLANTAS MEDICINALES EN EL SUR ANDINO. Cuzco, Perú: Equipo Coordinador en Medicina Natural Popular. September 1983.

G. Mendizabal Lozano. FUNDAMENTOS DOCTRINARIOS Y OPERATIVOS DE LA ASISTENCIA MATERNO-INFANTIL: Seminario Taller Inter-regional de Información y Coordinación de Proyectos con Cooperación Técnica Internacional, Trujillo. 1983.

Ministry of Economy, Finance, and Commerce. PRESUPUESTO DEL SECTOR PUBLICO PARA 1983. Ley No. 23556. Lima: Dirección General del Presupuesto Público. 1983.

Ministry of Health. INFORMATIVO: SEMINARIO-TALLER DE INFORMACION Y COORDINACION DE LOS PROYECTOS CON COOPERACION TECNICA INTERNACIONAL. Dirección General de Servicios de Salud, Dirección de Salud Materno Infantil y Población/AID. Cuzco. 1983.

--------. PLAN SECTORIAL DE SALUD 1983-1984. Seminario Taller de Información y Coordinación de los Proyectos con Cooperación Técnica Internacional, Arequipa-Trujillo-Lima. August 1983.

--------. INFORME FINAL REUNION DE CONSULTA TECNICA SOBRE PARTICIPACION COMUNITARIA EN SALUD. Lima: Dirección General de Servicios de Salud. 18 Agosto 1983.

--------. MODELO NORMATIVO PARA EL "CURSO DE EDUCACION COMUNITARIA EN SALUD." Lima: Dirección General de Servicios de Salud, Dirección de Salud Materno-Infantil y Población. July 1983.

---------. III SEMINARIO REGIONAL SOBRE COORDINACION INTERSECTORIAL Y DIVULGACION DE LA ATENCION PRIMARIA DE LA SALUD: INFORME FINAL. Tarapoto. 8-10 June 1983.

--------. MODELO NORMATIVO PARA LA CAPACITACION DE PROMOTORES DE SALUD. Lima: Dirección General de Servicios de Salud, Dirección de Salud Materno Infantil y Población. April 1983.

--------. PROYECTO DE ATENCION PRIMARIA Y SERVICIOS BASICOS DE SALUD: CONVENIO DE COOPERACION TECNICA-FINANCIERA. Banco Internacional de Reconstrucción y Fomento (PN 2211-PE). La Libertad, Lima, Centro Medio, Huánuco. 28 March 1983.

--------. LA EXTENSION DE LA COBERTURA DE SERVICIOS EN PUNO CON LA ESTRATEGIA DE LA ATENCION PRIMARIA DE SALUD. Puno, Perú: Regional Office. 1983.

--------. NORMAS Y DIRECTIVAS ADMINISTRATIVAS PARA LA PREVENCION DEL EMBARAZO DE ALTO RIESGO. Lima. 1983.

--------. I SEMINARIO DE COORDINACION INTERSECTORIAL Y DIVULGACION DE ATENCION PRIMARIA DE LA SALUD, 3-4 AGOSTO: INFORME FINAL. Moyobamba: Region de Salud Nor-Oriente, Area Hospitalaria No. 2. 1983.

--------. REVISTA INFORMATIVA TECNICO ADMINISTRATIVA. Lima: Oficina General de Administración. 1983.

--------. PLAN GENERAL DEL PROYECTO "SALUD MATERNO INFANTIL Y PLANIFICACION FAMILIAR", Proyecto 1301, Ministerio de Salud-OPS/OMS/UNFPA. 1983.

--------. SEMINARIO: PRINCIPIOS DE EPIDEMIOLOGIA PARA EL CONTROL DE ENFERMEDADES TRANSMISIBLES. Dirección General de Servicios de Salud, Dirección de Salud Materno Infantil y Población, and AID. 1983.

--------. PRESUPUESTOS ANALITICOS DE GASTO DEL SECTOR SALUD: EJERCICIO PRESUPUESTAL 1983: Volumen 01-Gobierno Central: Pliego: 01, Ministerio de Salud: Sector 14, Salud. Unidades Presupuestarias: Del 01 al 07. Lima. 1983.

--------. PRESUPUESTOS ANALITICOS DE GASTO POR UNIDADES PRESUPUESTARIAS Y PROGRAMAS: Volumen: 01-Gobierno Central: Sector 14, Salud: Pliego 01, Ministerio de Salud. Lima.

--------. LINEAMIENTOS DEL PLAN DE ALFABETIZACION SANITARIA, 1983-1985. n.d.

--------. NIVELES DE RESPONSABILIDAD EN LA FORMACION Y CAPACITACION DE PERSONAL DE SALUD, Directiva Administrativa DVM. No. 0071-81. Lima. 1983.

--------. SEMINARIO TALLER DE INFORMACION Y COORDINACION DE LOS PROYECTOS CON COOPERACION TECNICA INTERNACIONAL: RESOLUCION VICE-MINISTERIAL. Lima: Dirección de Salud Materno Infantil y Población. Dirección General de Servicios de Salud. 18 de Noviembre 1982.

--------. PLANES OPERATIVOS 1982-1983, PROYECTOS EXTENSION DE COBERTURA DE SALUD PRIMARIA INTEGRAL (527-0219), GOBIERNO PERUANO-AID: ANCASH, AREQUIPA, HUANUCO, LIMA-CALLAO, PIURA-TUMBES, SAN MARTIN. Lima. 1982.

--------. MODULO AUTOINSTRUCCIONAL SOBRE SUPERVISION. Lima. 1983.

--------. CONVENIO SOBRE COOPERACION TECNICA NO REEMBOLSABLE. Gobierno de la Republica del Perú y Banco Interamericano de Desarrollo. ATN/TF-2016-PE (Primera Fase del Programa de Capacitación de Recursos Humanos de Salud para el Nivel Primario). Lima. 1981.

--------. NORMAS DE REHIDRATACION ORAL EN NIÑOS CON ENFERMEDAD DIARREICA AGUDA. Lima. 1980.

--------. PLAN NACIONAL DE APOYO A LA ATENCION PRIMARIA DE SALUD 1980-1983. Lima: Dirección General de Programas de Salud, Grupo de Trabajo de Atención Primaria. 1980.

--------. BASES PARA EL PROGRAMA DE ATENCION DE SALUD DE LA MADRE Y EL NIÑO, 1983-1984. Lima. 30 June 1983.

--------. PLAN NACIONAL DE APOYO A LA ATENCION PRIMARIA DE SALUD 1980-83. Lima: Dirección General de Programas de Salud, Grupo de Trabajo de Atención Primaria. Septiembre 1978.

--------. GUIA METODOLOGICA PARA LA REALIZACION DE LAS REUNIONES EDUCATIVAS DE SALUD. n.d.

R. C. Moore. CONSULTANT'S REPORT ON FINANCIAL SYSTEMS, PRIMARY HEALTH CARE PROJECTS, MINISTRY OF HEALTH, PERU. Lima: Westinghouse Health Systems, AID/C-3024. 19 September-16 December 1983.

F. Muller. PARTICIPACION POPULAR EN PROGRAMAS DE ATENCION SANITARIA PRIMARIA EN AMERICA LATINA. Antioquia, Colombia: Universidad de Antioquia, Facultad Nacional de Salud Pública. October 1979.

R. Naroll and R. Cohen, eds. A HANDBOOK OF METHOD IN CULTURAL ANTHROPOLOGY. Garden City, NY: Natural History Press. 1970.

N. H. Nie, D. H. Bent, and C. H. Hull. STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES. New York: McGraw-Hill. 1970.

O. Nuñez del Prado. KUYO CHICO· APPLIED ANTHROPOLOGY IN AN INDIAN COMMUNITY. Chicago: University of Chicago Press. 1973.

B. Orlove. Inequality Among Peasants: The Forms and Uses of Reciprocal Exchange in Andean Peru. IN PEASANT LIVELIHOODS. R. Halperin and J. Dow, eds. New York: St. Martin's Press. 1977.

S. Palomino Flores. Duality in the Socio-Cultural Organizations of Several Andean Populations. FOLK (Copenhagen) 13:65-88. 1971.

P. J. Pelto. ANTHROPOLOGICAL RESEARCH: THE STRUCTURE OF INQUIRY. New York: Harper and Row. 1970.

B. Pillsbury. Policy and Evaluation Perspectives on Traditional Health Care Practitioners in National Health Care Systems. SOCIAL SCIENCE AND MEDICINE 16:1825-1834. 1982.

J. F. Ponce. SITUACION DE SALUD, POLITICAS Y ACCIONES PRIORITARIAS. (Presentation in the CAEM). Lima: Ministry of Health. May 1982.

V Region de Salud, Ancash. Area Hospitalaria No. 1-Chimbote. INFORME DEL IV CURSO DE CAPACITACION DE PROMOTERS DE SALUD. Huarmey. October 1983.

Region de Salud, Puno. PLAN OPERATIVO, DECIMA REGION DE SALUD DE PUNO: PROYECTOS EXTENSION DE COBERTURAS DE SALUD PRIMARIA INTEGRAL Y SERVICIOS INTEGRADOS DE SALUD MATERNO INFANTIL Y PLANIFICACION FAMILIAR, GOBIERNO PERUANO/AID. Puno. 1983.

X Region de Salud, Puno. PLAN DE SUPERVISION REGIONAL 1983-1984. Puno. August 1983.

I. C. Robinson. PRIMARY HEALTH CARE FORMULARY. Washington, D.C.: Contract (ADSS) AID/DSPRE-C-0053. August 1983.

E. Rosenstein, et al., eds. DICCIONARIO DE ESPECIALIDADES FARMACEUTICAS: PERU PLM. Panamá: Panamericana de Libros de Medicina, S.A. 1982 (1st Peruvian edition).

W. W. Stein. HUALCAN: LIFE IN THE HIGHLANDS OF PERU. Westport: Greenwood Press. 1961.

L. Susuki López. SEMINARIO TALLER DE INFORMACION Y COORDINACION DE LOS PROYECTOS CON COOPERACION TECNICA INTERNACIONAL. Dirección General de Servicios de Salud/Dirección de Salud Materno Infantil y Población. Proyecto UNICEF. 1983.

J. W. Townsend, H. U. Tello, and H. Gamarra D. ESTUDIO DE CASO: PROGRAMA MATERNO-INFANTIL Y POBLACION (PROSMIP): VII Region de Salud-Sur Medio. Proyecto 527-0224 USAID-Perú. 1979-1982.

USAID. QUARTERLY REPORT, PROJECTS 219 and 230. Lima: Office of Health, Nutrition, and Education. March 1984.

P. Van den Berghe and G. P. Primov. INEQUALITY IN THE PERUVIAN ANDES. Colombia and London: University of Missouri Press. 1977.

D. Werner. Health Care and Human Dignity: A Subjective Look at Community-Based Rural Health Programmes in Latin America. IN HEALTH: THE HUMAN FACTOR -- READINGS IN HEALTH DEVELOPMENT, AND COMMUNITY PARTICIPATION. S. Rifkin, ed. N.d.

D. Werner and B. Bower. HELPING HEALTH WORKERS LEARN. Palo Alto, California: The Hesperian Foundation. 1982.

Westinghouse Health Systems. CONTRACTOR'S QUARTERLY REPORT, PERU INTEGRATED HEALTH AND FAMILY PLANNING PROJECT. Lima: 20 February 1984.

M. Yepes-Barayu. CURSO DE CAPACITACION INICIAL DEL VIGIA (Memo para Dr. Rogelio Bermejo Ortega, Director Ejecutivo del Proyecto de Atención Primaria y Servicios Básicos de Salud). Lima. 26 Septiembre 1983.

SCOPE OF WORK

Background

In 1983 the MOH Health Regions programmed training courses for over 1342 rural and urban based health promoters. The health promoter program norms were revised by the MOH Central Administration in April 1983, but each Health Region interprets these norms and carries out the program according to its needs. Promoter training courses have been carried out in some Regions for the past 20 years. The total number of working promoters in Peru and their impact on improving health status is unclear. This evaluation will provide a better understanding of who the promoters are, what they are doing and what improvements should be made to more effectively implement the program.

ARTICLE I - TITLE

Evaluation of Government of Peru Health Promoter Program.

ARTICLE II - PURPOSE

The purpose of this work order is the provision of technical assistance to evaluate the implementation of the Ministry of Health (MOH) Promoter Program. Through interviews and surveys of program officials and observation of program activities, the contractor, in collaboration with the MOH and USAID/Lima, will address the following areas:

A. Adequacy of the process of selecting promoters;

B. Adequacy of promoters' training;

C. Community acceptance of promoters and responsiveness of program to community health needs;

D. Promoter activities attrition rates and reasons for desertion;

E. Adequacy of program supervision, logistical support, and incentives;

F. Managerial, administrative and financial requirements of the MOH to implement the current program and additional requirements to implement any suggested improvements.

ARTICLE III - STATEMENT OF WORK

A. Methodology

In order to carry out the study the contractor shall provide a seven member team over a four month period. The team will include one Nutritionist/Medical Anthropologist/Team Leader, one Manpower Development/Training Specialist, two Nutritionist/Medical Anthropologists, one Management Specialist and two Local Paramedical Training Specialists. The team, with the assistance of MOH personnel and in close collaboration with USAID, will carry out the following tasks:

1. A sample survey of at least 50 communities to assess the acceptability and cost of health promoter services, community participation in the program and efficiency of the promoter selection process;

2. A random survey of at least 200 previously trained promoters practicing and non-practicing to assess adequacy of training (especially of those trained under USAID Projects 219 and 230) over the past year and adequacy of supervision, logistical support, information system requirements, continuing training needs, incentives and overall MOH and community support;

3. Direct observation of six to eight on-going promoter training courses and a survey of trainees to determine the adequacy of the training curriculum and trainer skills, as well as promoters' satisfaction and perception of their roles;

4. A survey of at least 25 "Jeres de Area Hospitaiaria Unidades de Capacitacion" and the corresponding promoter trainers to determine regional variations and appropriateness of different approaches used, including in-service training and supervision;

5. A survey of MOH officials who influence the promoter program from each level of the MOH (Central, Regional, Area Hospitalaria, Centro, Puesto, Village/Pueblo Joven) to determine managerial, administrative and financial needs of the MOH to implement the program.

6. One week observations for case studies of a sample of three to six practicing promoters, carried out by medically trained consultants, to present a more in-depth picture of community needs and promoter responses.

The bulk of the raw data for the surveys will be collected by the Ministry of Health's Enumerators. The contractor will develop the tools and methodology for gathering the data.

B. Specific Tasks:

The contractor will carry out five surveys, observe on-going training classes, and complete three to six case studies that will provide evaluative information concerning each of the following program areas.

1. Adequacy of Selection

In as many Health Regions as possible, but not less than eight, the contractor's team will interview MOH personnel in charge of recruitment of health promoters, promoter trainees, practicing and non-practicing promoters. The evaluaton will include a description of the characteristics of MOH promoters, including sex, age, education, regular employment and income, and average length of service. The team will review the selection process with respect to:

a. Actual implementation of MOH Central Administration norms as carried out by Regions, Areas Hospitalaries (AHA), Centros and Puestos de Salud;

b. Formation of community health committees and adequacy of community participation in the selection process;

c. Adequacy of community participation in defining the communities' health needs;

d. Recruitment of traditional healers and/or traditional midwives as promoters.

2. Adequacy of Existing Training Programs

Medically trained members of the contractor's team will observe the on-going primary and/or in-service training programs. They will review health promoter training curricula for courses carried out over the past two years at Health Regions and will compare the contents and administration of each program with the norms outlined by the Central level MOH, distinguishing between urban and rural promoters. They will examine epidemiological patterns to determine if the training programs correspond to community needs. With regard to training needs, the team will evaluate:

a. Technical content, including percentage of time devoted to curative vs. promotional activities, and as related to health needs of villages/pueblos jovenes, i.e., epidemiology of communities health needs;

b. Methodology used, including theoretical vs practical training;

c. Course duration;

d. Course location;

e. Trainers--perceptions of the role of the promoters, motivation and interest, technical knowledge and previous training courses and experience;

f. Teaching materials and promoter manuals;

g. Students perceptions of their roles as health promoters and student satisfaction with training program;

h. Trainers perceptions of changes in promoter training over the past ten years.

The team should make recommendations as to needed revisions in the training program which would increase its effectiveness. This may include recommendations regarding course content, presentation and length, selection of alternative trainers and training locations, and revision of trainee selection criteria.

3. Acceptance of Health Promoters

Surveys and observation of promoters and training classes will address the following questions regarding acceptability of health promoters:

a. Are health promoters viewed as superior/inferior to and more/less accessible than other types of practitioners, especially to under-served rural villagers?

b. What characteristics (sex, age, education, social status, marriage status, previous experience as traditional healers, etc.) would allow health promoters to achieve maximum acceptance by the urban and rural populations, particularly women and children?

c. How are the health Promoters perceived by MOH bureaucrats, doctors, nurses, and auxiliares? What is the relationship of the health promoter vis a vis the rest of the primary health care team?

d. What are the costs of health promoter services--to the community; to the promoters themselves; to the MOH? What are alternative financing possibilities?

4. Promoter Activities and Attrition Rates

The contractor, in consultation with AHA, Centro and Puesto de Salud MOH officials, will randomly select and survey previously trained promoters in order to provide the following evaluation information:

a. A list of activities performed by promoters, i.e., job description, including the amount of time devoted to carrying out these activities;

b. Attrition rates, reasons for desertion, and average length of service of non-practicing promoters;

c. Attrition rates, reasons for non-desertion, and average length of service of practicing promoters, including information on incentives provided for continued services;

d. Other health related activities being carried out by promoters;

e. Opportunities for upward mobility within the MOH system and the private sector.

5. Supervision and Implementation of Promoter Program

Through surveys and observations the contractor's will identify and interview health promoters and will describe supervision procedures and practices with regard to:

a. Level and position of supervisors;

b. Frequency of visits;

c. Required reports and information feedback;

d. Operation of revolving drug funds (botiquin comunal) if they exist, including payment and resupply mechanisms;

e. Other supervison or in-service training mechanisms, including regular meetings of promoters, newsletters or publications sent regularly to promoters, or other more innovative approaches.

f. Integration of promoters within the MOH primary health care system -- relationship to other primary health care workers, main point of contact within MOH system (Centro, AHA, puesto), professional backstopping and administrative support.

6. Program Needs of Promoters and MOH

The team will interview promoters and will explore with the Ministry its needs, recommending program changes where appropriate, focussing on the following areas;

a. Community participation and MOH norms in promoter selection process;

b. Design of training curricula, production, procurement and distribution of training materials;

c. Communications and feedback between MOH Central Administration in Lima and field offices;

d. Logistics, especially regarding flow of materials and supplies to promoters;

e. Promoter satisfaction, including financial and other incentives, payment for services and MOH support;

f. Program planning, and coordination between USAID and MOH, and coordination between USAID, MOH and other health donor agencies;

g. Program planning, coordination, and integration of promoters' activities with other health auxiliary training programs of the MOH, including opportunities for upward mobility;

h. Other aspects of administration and financing which may effect project implementation.

ARTICLE IV - REPORTS

The Contractor will prepare a final report in English and Spanish and will submit 25 copies of each to USAID/Lima, including a five page executive summary for each language, summarizing the results of the surveys, observations and recommendations for program improvement. Four copies of the contractor's final report shall be submitted in English and Spanish to USAID/Lima before the departure of the consultant team from Lima. The remaining copies should be pouched to the Mission within 20 working days of the team's departure.

ARTICLE V- SPECIFIC TEAM MEMBER RESPONSIBILITIES

A. Nutritionist/Medical Anthropologist - Team Leader

This individual will have overall responsibility for preparing the Promoter Evaluation in a final draft to be approved by USAID/Lima before the team's departure from Peru. He/She will serve as the Team Leader and will be responsible for the logistics support of the team during the assignment. This responsibility includes maintaining communications with all team members, as well as keeping USAID/Lima informed, in writing, on a monthly basis during the three and one-half months assignment regarding progress made by the team, including any problems encountered in executing the assignment. The team leader will be responsible for choosing the samples for the surveys, supervising fieldwork, analyzing and editing the final report.

B. Manpower Development/Training Specialist

This individual will be responsible for the following sections of the evaluation observations of training classes; case studies of practicing promoters; supervision of two local paramedical trainers. He/She will work with the Team Leader to develop survey instruments and field work schedule.

C. Nutritionist/Medical Anthropologist (2)

These individuals will work under the direction of the Team Leader to design survey instruments, train interviewers, supervise fieldwork and write the final report. They will also assist Paramedical Trainers with the case studies.

D. Management Specialist

This individual will work under the direction of the Team Leader in the design of survey instruments and in carrying out interviews with MOH personnel regarding costs and logistics management of the MOH promoter Program. The health economist will prepare a section of the evaluation describing costs and logistical management of the Promoter Program.

E. Local Paramedical Trainers (2)

The Local Paramedical Trainers will assist the Manpower Development/Training Specialist with observations of on-going training programs and case studies. They will work with the Nutritionist/Medical Anthropologists in designing and testing of field survey instruments, training of interviewers and analysis of data. They will assist the Team Leader in developing the final report in Spanish.

APPENDIX B

CONTACTS AND PARTICIPANTS
HEALTH PROMOTER EVALUATION

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Nutrition Division

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Dr. John Gillespie
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Dr. José García Nuñez
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Ministry of Health, Headquarters, Lima

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Director General de Servicios de Salud

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Director, Dirección de Salud, Materno Infantil y Población (DSMIP)

Dr. Jorge Castello Castello
Director General, Escuela de Salud Pública del Perú

Dr. Rogelio Bermejo

Dra. Juana García
Dirección de Salud, Materno Infantil y Población

Enf. Margot Zarate
Dirección de Salud, Materno Infantil y Población

Other Donors and Private Voluntary Organizations

Dr. Michael Wolff
GTZ

Ministry of Health Regional Headquarters, Hospital Areas, Local Hospitals, Health Centers, and Health Posts

A large number of Ministry of Health representatives at different levels of the system were interviewed for some portion of the evaluation and helped, as well, with arrangements for the field interviews with promoters and communities. Each of these, as were the survey trainers, supervisors, and the interviewers themselves, were given a certificate, signed jointly by representatives of the Peruvian Ministry of Health, the USAID Mission in Lima, and Management Sciences for Health. Copies of these certificates and related letters of appreciation follow these lists.

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Georgina Valverde Trinidad
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Arcadia Rosales Sanchez
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Jesús Gutierrez
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Sr. Federico Philipps Figueroa
Colaborador

Juan Arturo Mendoza
Colaborador

Ministerio de Salud

DIRECCION GENERAL DE SERVICIOS DE SALUD

CERTIFICADO

A: _____

POR HABER PARTICIPADO EN CALIDAD DE: _____

EN LA ENCUESTA REALIZADA PARA EL ESTUDIO Y EVALUACION DE PROMOTORES DE SALUD EN EL PERU.

LIMA MAYO 1984

MINISTERIO DE SALUD
Dirección General de Servicios de Salud
DIRECTOR GENERAL

Dr. JUAN MANUEL SOTELO FIGUEREIDO
Director General de Servicios de Salud

Dr. KJELL I. ENGE
M. S. H.

Srta. JOAN LA ROSA
A. I. D.

MANAGEMENT SCIENCES FOR HEALTH
A NONPROFIT INSTITUTION

OFICIO CIRCULAR N° 002.

Lima, 22 de Mayo de 1984.

Me es grato dirigirme a Ud., para hacerle llegar nuestro agradecimiento, por su apoyo brindado al Equipo de Investigación para el Estudio y Evaluación de los Promotores de Salud de la Región a la que Ud. pertenece.

Aprovecho la oportunidad para saludarle y hacerle llegar los sentimientos de mi más alta consideración y estima personal.

Atentamente,

Kjell I. Enge

Dr. KJELL I. ENGE
Jefe del Equipo de Investigación

KIE/ac.

165 ALLANDALE ROAD, BOSTON, MASSACHUSETTS 02130
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LILONGWE PORT-AU-PRINCE RABAT SANAA TEGUCIGALPA WASHINGTON

MANAGEMENT SCIENCES FOR HEALTH
A NONPROFIT INSTITUTION

Oficio Circular N°003-84.

Lima, 25 de Mayo de 1984.

Señor Doctor
Juan Manuel Sotelo F.
Director General de la
Dirección Gral. de Servicios de
Salud
Ministerio de Salud
Presente

Tengo el agrado de dirigirme a Ud., en esta oportunidad para hacer le llegar nuestro agradecimiento por el apoyo brindado a los miembros del Equipo de Investigación para el Estudio y Evaluación de los Promotores de Salud, llevado a cabo en las Regiones de Salud seleccionaaas.

Reiterando nuestro agradecimiento, es propicia la ocasión para expresarle a Ud. los sentimientos de mi especial consideración.

Atentamente,

Dr. Kjell I. Enge
Jefe del Equipo de Investigación

KIE/ac.

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MANAGEMENT SCIENCES FOR HEALTH
A NONPROFIT INSTITUTION

Lima, 21 de Mayo de 1984

Oficio Circular N°001

Sr.Dr. Luis Fernan Zegarra
Director de la VIII Región de Salud
AREQUIPA.-

Me es grato dirigirme a Ud. para hacerle llegar nuestro agradecimiento por el apoyo prestado a los miembros del Equipo de Investigación para el Estudio y Evaluación de los Promotores de Salud de la Región que Ud. tan dignamente dirije. Estamos seguros que los resultados obtenidos en las Encuestas realizadas, serán de gran utilidad para su Región y el Ministerio de Salud; ya que, permitirán conocer las Actividades que realiza el Promotor y su repercusión en la Comunidad.

Los resultados del Informe final le haremos llegar en cuanto concluya el Estudio.

Aprovecho la oportunidad para saludarle y reiterarle los sentimientos de mi más alta consideración y estima personal, solicitándole hacer extensivo nuestro agradecimiento a los Miembros de su Equipo Técnico.

Atentamente,

Dr. Kjell I. Enge
Jefe del Equipo de Investigación.

C.C.: Direcciones Regionales : I Piura
V Ancash
VII Ica
VIII Arequipa
XIV Huánuco
X Puno
XV San Martín
XVII Callao.

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ENCUESTA DE LA COMUNIDAD

****

Entrevistador - Antes de preguntar lo siguiente, presentese a la persona y explíquele el objetivo de la visita.

"Buenos días/tardes .....

Me llamo _____, soy técnico sanitario/auxiliar sanitario/auxiliar de enfermería del Puesto de Salud de _____.
Estamos haciendo un estudio y esperamos conocer sus opiniones sobre el trabajo que realizan los promotores de salud en esta comunidad.

Las respuestas que me dé serán utilizadas solamente para los fines de estudio y en ninguna forma podrán perjudicarle a Ud. o a nadie de su comunidad. Le agradeceré me conteste de la manera más exacta y sincera posible."

- - - - - - - - - - - - - -

A. Datos Generales sobre la Comunidad y Región

A. 1 Región de Salud _____
Area Hospitalaria _____
Comunidad _____

A. 2 Zona Ecológica
1 [ ] costa
2 [ ] selva baja
3 [ ] selva alta
4 [ ] sierra (sur)
5 [ ] sierra (norte-centro)

A. 3 Población de la comunidad entrevistada
1 [ ] menos de 500
2 [ ] 1000 - 1500
3 [ ] más de 2000
4 [ ] 500 - 1000
5 [ ] 1500 - 2000

- - - - - - - - -

Entrevistador - observe lo siguiente de la vivienda del informante:

- - - - - - - - -

A. 4 ¿De qué material es el techo?
1 [ ] teja
2 [ ] calamina
3 [ ] paja
4 [ ] eternit

A. 5 ¿De qué material es el piso?
1 [ ] tierra
2 [ ] madera
3 [ ] cemento
4 [ ] algunas son de tierra otras de cemento

A. 6 ¿Cuantas habitaciones hay en la casa del informante?
[ ] No. de habitaciones (solamente contar dormitorios, sala y cocina)

****

B. Historia Personal del Informante

B. 1 Sexo del Informante 1 [ ] hombre 2 [ ] mujer

B. 2 ¿Qué edad tiene usted? [ ] años

B. 3 ¿Cuál es su estado civil?
1 [ ] casado 3 [ ] soltero 5 [ ] divorciado
2 [ ] viudo 4 [ ] conviviente

B. 4 ¿Cuantos hijos tiene usted?
[ ] No. de hijos

B. 5 ¿Sabe usted leer y escribir?
1 [ ] si 2 [ ] no [pase a B7]

B. 6 ¿Hasta que año ha estudiado usted en la escuela?
1 [ ] ninguno
2 [ ] 2 de primaria
3 [ ] 5 de primaria
4 [ ] secundaria 1-2
5 [ ] más

B. 7 Aparte del castellano, ¿qué otros idiomas habla usted?
1 [ ] quechua 3 [ ] otro _____ (especifique)
2 [ ] aymara 4 [ ] otro _____ (especifique)

B. 8 ¿Cuál es el idioma principal que se habla en la comunidad?
1 [ ] castellano 3 [ ] aymara
2 [ ] quechua 4 [ ] otro _____ (especifique)

B. 9 ¿Aparte del castellano, ¿qué otros idiomas habla la gente de esta comunidad?
1 [ ] quechua 2 [ ] aymara 3 [ ] otro _____ (especifique)
4 [ ] otro _____ (especifique)

B. 10 ¿Cuanto tiempo vive usted en esta comunidad?
[ ] años [ ] meses

B. 11 ¿Cuál es su trabajo principal que dá el dinero para mantenerse?
1 [ ] agricultura para consumo propio 4 [ ] ama de casa
2 [ ] agricultura comercial 5 [ ] trabajo no asalariado
3 [ ] independiente 6 [ ] ambulante 7 [ ] otros _____ (especifique)

****

C. Disponibilidad de Servicios de Salud

C. 1 ¿A que distancia de su casa queda el puesto de salud mi cercano?
[ ] kilómetros [ ] tiempo (horas)

C. 2 ¿ A qué distancia queda el centro de salud más cercano?

[ ] kilómetros [ ] tiempo (horas)

C. 3 ¿Hay algún servicio de salud en esta comunidad?

1 [ ] sí
2 [ ] no [pase a C.5]
3 [ ] no sé [pase a C.5]

C. 4 ¿Cuales?

_____
_____
_____

C. 5 ¿Tiene uno de los siguientes recursos en esta comunidad?

[Entrevistador - lea la lista de abajo]

	Sí 1	No 2	No sé 3
1. promotor de salud			
2. vigía			
3. riychary			
4. partera			
5. farmacia			
6. botica			
7. botiquín comunal			
8. curandero			
9. huesero			
10. yerbatero			
11. no hay ninguno de estos			
12. otros _____ (especifique)			

C. 6 ¿Cuantas parteras hay en su comunidad?

[ ] número

C. 7 ¿Sabe usted si algunas de las partera han recibido algún curso?

1 [ ] sí 2 [ ] no 3 [ ] no sé

C. 8 ¿Qué es un promotor de salud? _____
_____
_____

C. 9 Si hay un promotor de salud en esta comunidad, ¿reside aquí?

1 [ ] sí 2 [ ] no 3 [ ] no sé

C. 10 ¿Sabe usted como se llama el promotor de su comunidad?

1 [ ] sí _____ nombre [pase a C.12]

2 [ ] no

C. 11 El promotor se llama _____, ¿le conoce usted?

1 [ ] sí 2 [ ] no

C. 12 ¿El promotor que trabaja aquí es hombre o mujer?

1 [ ] hombre 2 [ ] mujer

C. 13 ¿Cree usted que es mejor que el promotor sea hombre o mujer?

1 [ ] hombre 2 [ ] mujer

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C. 14 ¿En qué aspectos cree usted que es mejor que el promotor sea hombre o mujer? _____

_____

_____

C. 15 ¿Sabe usted quién eligió al promotor de su comunidad?
1 [ ] sí 2 [ ] no 3 [ ] no sé

C. 16 ¿Quién le eligió?
1 [ ] comité de salud
2 [ ] alcalde
3 [ ] sanitario
4 [ ] personal del centro de salud
5 [ ] personal del hospital
6 [ ] miembros de la comunidad
7 [ ] líderes de la comunidad
8 [ ] comité de desarrollo
9 [ ] miembros de su comunidad
10 [ ] otros _____
(especifique)

C. 17 ¿Participó usted en la elección del promotor?
1 [ ] sí 2 [ ] no

C. 18 ¿Sabe usted algún promotor que actualmente no trabaje como tal en su comunidad? 1 [ ] sí 2 [ ] no

C. 19 Si tuvo la comunidad un promotor antes, ¿sabe por qué ya no trabaja?
1 [ ] emigró 2 [ ] buscó trabajo 3 [ ] otro _____
(especifique)

C. 20 ¿Ha ido alguna vez a un promotor para solucionar sus problemas de salud? 1 [ ] sí 2 [ ] no (pase a C.22)

C. 21 Si ha ido al promotor para solucionar sus problemas de salud, ¿por qué problema de salud? _____

_____

_____

C. 22 Si no ha ido usted al promotor para resolver sus problemas de salud, ¿por qué no lo hizo? _____

_____

_____

C. 23 ¿Alguna vez el promotor ha visitado su casa?
1 [ ] sí 2 [ ] no

****

D. Comité de Salud

D. 1 ¿Qué es un comité de salud?

_____

_____

_____

D. 2 ¿Sabe si hay algún comité de salud en su comunidad?

1 [ ] Si (pase a D.5)
2 [ ] No
3 [ ] no sé

D. 3 Si no hay un comité de salud ahora, ¿Lo tuvieron alguna vez?

1 [ ] Si 2 [ ] No 3 [ ] no sé

D. 4 Si no hay un comité de salud ahora, pero lo hubo antes, ¿Cuando se disolvío este comité?

Hace [ ] meses
[ ] años

D. 5 ¿Quién fué responsable de organizar el comite de salud?

1 [ ] promotor
2 [ ] sanitario
3 [ ] grupo comunal
4 [ ] alcalde
5 [ ] líderes locales
6 [ ] otros _____
(especifique)

D. 6 ¿Es usted, o lo fué antes, mienbro de un comité de salud?

1 [ ] Si 2 [ ] No 3 [ ] no sé

D. 7 ¿Forma parte el promotor el comité de salud?

1 [ ] Si 2 [ ] No 3 [ ] no sé

D. 8 ¿Sabe si el comité de salud dá apoyo al promotor?

1 [ ] Si 2 [ ] No 3 [ ] no sé

- - - - - - - - -

Entrevistador - no lea las respuestas de la siguiente pregunta

- - - - - - - - -

D. 9 ¿De qué manera apoya el comité de salud al promotor?

1 [ ] alojamiento
2 [ ] comida
3 [ ] salario
4 [ ] consultorio
5 [ ] viatico
5 [ ] material de construcion
6 [ ] transporte
7 [ ] capacitación
8 [ ] exoneración de trabajo comunal
10 [ ] no sé

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E. Enfermedades, Curaciones, Vacunaciones y Partos

E. 1 ¿Quien fué la última persona que estuvo enferma en esta casa?

1 [ ] adulto femenino
2 [ ] adulto masculino
3 [ ] niño mayor de cinco años
4 [ ] niño menor de cinco años

E. 2 ¿Cual fué la última enfermedad de esta persona?

1 [ ] gripe o resfriado
2 [ ] estómago
3 [ ] accidente
4 [ ] envenenamiento
5 [ ] diarreas o parásitos
6 [ ] otro _____ (especifique)

E. 3 ¿Fué usted al promotor para solicitar ayuda en esta enfermedad?

1 [ ] Sí 2 [ ] No

E. 4 ¿Quién le dió los mejores consejos para el tratamiento en esta enfermedad?

1 [ ] médico
2 [ ] promotor de salud
3 [ ] sanitario
4 [ ] enfermero/a
5 [ ] farmacéutico
6 [ ] partera
7 [ ] curandera
8 [ ] pariente
9 [ ] amigo
10 [ ] otro _____ (especifique)

E. 5 ¿Ha ido al promotor para curar la diarrea de su niño?

1 [ ] Sí 2 [ ] No [pase a E.10]

E. 6 ¿El promotor le ha enseñado a hervir el agua antes de tomarla?

1 [ ] Sí 2 [ ] No

E. 7 Si el promotor curó la diarrea de su niño, ¿Con que remedio lo trató?

1 [ ] sales rehidratantes [pase a E.8]
2 [ ] suero casero [pase a E.8]
3 [ ] jarabe antidiarréico
4 [ ] lo mandó al puesto o centro de salud
5 [ ] no sé
6 [ ] nada
7 [ ] otro _____ (especifique)

E. 8 Si el promotor usó sales de rehidratación oral o suero casero ¿hirvió el agua para hacer la mezcla, o utilizó agua hervida?

1 ☐ sí 2 ☐ no 3 ☐ no sé

E. 9 ¿Qué le dijo el promotor sobre al alimentación del niño durante el tratamiento para la diarrea?

1 ☐ continuar la alimentación
2 ☐ suspender la alimentación
3 ☐ suspender la leche materna
4 ☐ no dijo nada
5 ☐ no se acuerda

E. 10 ¿Ha ido usted al promotor para que trate a alguien en su familia que tuvo resfriados o gripe?

1 ☐ sí 2 ☐ no [pase a E. 13]

E. 11 ¿Qué le indicó?

1 ☐ pastillas
2 ☐ jarabe
3 ☐ una inyección
4 ☐ bolsita salvadora
5 ☐ no se acuerda

E. 12 ¿Le dió o le dijo donde conseguir esta medicina?

1 ☐ sí, le dió
2 ☐ sí, le dijo donde conseguirla
3 ☐ no
4 ☐ no sé

E. 13 ¿Ha habido una campaña de vacunaciones para los niños de su comunidad en el año pasado?

1 ☐ sí
2 ☐ no [pase a E.15]
3 ☐ no sé [pase a E.15]

E. 14 ¿Ha participado el promotor en las campañas de vacunaciones?

1 ☐ sí 2 ☐ no 3 ☐ no sé

E. 15 ¿Ha atendido el promotor algún parto en sus casa?

1 ☐ sí
2 ☐ no [pase a la sección F]
3 ☐ no sé [pase a la sección F]

E. 16 ¿Qué hizo el promotor antes de atender el parto?

1 ☐ hirvió el agua
2 ☐ lavó sus manos
3 ☐ lavó las partes de la madre
4 ☐ palpó el vientre de la madre
5 ☐ otro _____
(especifique)
6 ☐ nada
7 ☐ no se acuerda

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E. 17 ¿Qué hizo el promotor para atender al recién nacido?

1. ☐ realizó la curación del cordón umbilical
2. ☐ aplicó gotitas a los ojos
3. ☐ revisó al niño para detectar algún problema
4. ☐ pesó al niño
5. ☐ indicó como alimentarlo
6. ☐ dió consejos para inscribir al niño en la municipalidad
7. ☐ dió consejos sobre la importancia del control médico del niño
8. ☐ dió consejos sobre la importancia de las vacunas
9. ☐ otro _____
(especifique)

****

F. Actividades Educativas del Promotor en la Comunidad

F. 1 ¿Ha asistido usted a una charla dada por el promotor?

1. ☐ sí 2. ☐ no [pase a F.3]

F. 2 ¿Sobre qué tema(s) habló el promotor?

1. ☐ aseo personal
2. ☐ disposición de basuras y excretas
3. ☐ importancia de vacunas
4. ☐ importanica de letrinas
5. ☐ prevención de diarrea
6. ☐ bienestar de la mujer embarazada
7. ☐ prevención de parásitos
8. ☐ nutrición y manejo de alimentos
9. ☐ importancia de paternidad responsable/planificación familiar
10. ☐ lactancia materna y destete
11. ☐ otros _____
(especifique)

F. 3 ¿Qué otras actividades realiza el promotor en la comunidad?

1. ☐ dá primeros auxilios
2. ☐ cura enfermedades
3. ☐ vende medicinas
4. ☐ dá medicinas sin cobrar
5. ☐ trabaja en la instalación y cuidados de las letrinas
6. ☐ ayuda con la instalación de agua potable
7. ☐ dá alimentos
8. ☐ dá vacunas
9. ☐ ayuda a hacer huertos
10. ☐ participa en las reuniones de la comunidad
11. ☐ otras actividades _____
(especifique)

F. 4 ¿Le ha enseñado a usted el promotor como preparar el contenido de la bolsa de rehidratación oral o el suero casero?

1. ☐ sí 2. ☐ no 3. ☐ no sé

F. 5 ¿Le ha dicho el promotor donde pueden conseguir ayuda para planificación familiar?

1. [ ] sí 2. [ ] no 3. [ ] no sé

****

G. Costos - Medicinas y Servicios del Promotor

G. 1 ¿Ha recibido usted o alguien de la casa los siguientes servicios del promotor durante el més pasado?

1. [ ] consulta
2. [ ] medicinas
3. [ ] primeros auxilios
4. [ ] ayuda al parto
5. [ ] inyecciones
6. [ ] materiales para planificación familiar
7. [ ] otro _____ (especifique)
8. [ ] ninguno [pase a G.3]

G. 2 ¿Cuanto pagó usted por sus servicios o medicinas en la atención más reciente?

1. consulta [ ] soles u otro _____ (especifique)
2. medicinas [ ] soles (indique qué medicina)
3. primeros auxilios [ ] soles (indique tipo)
4. ayuda al parto [ ] soles
5. material para paternidad responsable [ ] soles
6. otro [ ] soles (especifique)

G. 3 ¿Qué tipo de transporte usa para ir a ver al promotor?

1. [ ] pié
2. [ ] mobilidad
3. [ ] bestia
4. [ ] otro _____ (especifique)

G. 4 ¿Cuanto tiempo tarda en llegar al lugar donde presta atención el promotor?

[ ] minutos [ ] horas

G. 5 ¿Sabe usted qué es un botiquín comunal? _____

_____

G. 6 ¿Tienen botiquín comunal en la comunidad?

1. [ ] sí 2. [ ] no [pase a G.10] 3. [ ] no sé [pase a G.10]

G. 7 ¿Hace cuanto tiempo que lo tienen? [ ] meses [ ] años

G. 8 ¿Lo usa usted? 1. [ ] sí 2. [ ] no

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G. 9 Si el botiquín está cerrado ahora, ¿por qué se cerró?

1. ☐ no sé
2. ☐ falta de dinero
3. ☐ falta de medicinas
4. ☐ otro _____ (especifique)

G. 10 ¿Ha comprado usted medicinas de algunos de los siguientes lugares durante el mes pasado?

1. ☐ puesto de salud
2. ☐ centro de salud
3. ☐ hospital local
4. ☐ hospital regional
5. ☐ bodega
6. ☐ botiquín comunal
7. ☐ farmacia
8. ☐ otro _____ (especifique)
9. ___ no [pase a H.1]

G. 11 ¿Cuanto pagó usted por las medicinas en su última visita y cuanto le costó la mobilidad para llegar allí?

[Entrevistador - si no pagaron nada, marque G (gratis); si pagaron algo pero no se acuerdan de la cantidad, marque S (soles)]

	medicinas		transporte	
1. puesto de salud		soles		soles
2. centro de salud		soles		soles
3. hospital local		soles		soles
4. hospital regional		soles		soles
5. bodega		soles		soles
6. botiquín comunal		soles		soles
7. farmacia		soles		soles
8. Otro (especifique)		soles		soles

****

H. Efectos del Trabajo del Promotor del Salud en la Comunidad

H. 1 En su opinión, ¿se ha notado alguna mejora en el estado de salud o en el bienestar de la comunidad debido a las actividades del promotor de salud?

1. ☐ si
2. ☐ no [pase a H.3]
3. ☐ no sé [pase a H.3]

H. 2 ¿En qué sentido ha sido la mejora?

1. ☐ instalación de agua potable
2. ☐ instalación de letrinas sanitarias
3. ☐ se cuenta con una persona capacitada para atender los problemas de salud más urgentes
4. ☐ se recibe auxilio inmediato en caso de enfermedad
5. ☐ los niños reciben las vacunas que les corresponden
6. ☐ los niños se enferman y mueren menos
7. ☐ han disminuido las diarreas
8. ☐ la comunidad está informada de los servicios de salud existentes
9. ☐ la comunidad recibe ayuda sobre paternidad responsable
10. ☐ las madres mueren menos por complicaciones del embarazo o del parto
11. ☐ con las transferencias que dá el promotor, los pacientes son atendidos en el puesto de salud y/o centro de salud
12. ☐ la comunidad cuenta con las medicinas a la mano
13. ☐ la comunidad participa en las actividades de salud

H. 3 ¿Qué piensa usted se puede hacer para que el promotor ayude mejor a la comunidad?

1. ☐ más capacitación
2. ☐ pagarle
3. ☐ más equipo
4. ☐ más tiempo
5. ☐ otra persona
6. ☐ otro _____
   (especifique)

H. 4 ¿Cuales son los problemas más importantes de la comunidad?

_____
_____
_____
_____
_____

****

Observaciones del Entrevistador

Nombre del Entrevistador _____

Grado de Cooperación del Entrevistado.

1. muy bueno ☐
2. bueno ☐
3. regular ☐
4. malo ☐

Comentarios:

(condiciones de la casa; comprensión y manera del entrevistado de responder a las preguntas; y problemas con algunas preguntas específicas)

_____
_____
_____

ENCUESTA DEL PROMOTOR

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Entrevistador - Antes de preguntar lo siguiente al promotor, explíquele el objetivo de la visita.

"Buenos días/tardes ..... Me llamo _____, soy técnico sanitario/ auxiliar sanitario/auxiliar de enfermería del Puesto de Salud de _____. Estamos haciendo un esturlio sobre atención primaria de salud. Me gustaría hacerle una preguntas sobre su trabajo ya que usted es un promotor de salud con entrenamiento y experiencia.
La respuestas que me dé serán utilizadas solamente para los fines de este estudio y no en ninguna forma podrán perjudicarle a usted o a nadie de su comunidad. Le agradeceré me conteste de la manera más exacta y sincera posible."

- - - - - - - - - -

A. Datos Generales sobre la Comunidad y Región

A. 1 Región de Salud _____
Area Hospitalaria _____
Comunidad _____

A. 2 Zona Ecológica 1 [ ] costa 4 [ ] sierra (sur)
2 [ ] selva baja 5 [ ] sierra (norte-centro)
3 [ ] selva alta

A. 3 Población de la comunidad entrevistada
1 [ ] menos de 500 4 [ ] 500-1000
2 [ ] 1000-1500 5 [ ] 1500-2000
3 [ ] más de 2000

- - - - - -

Entrevistador - observe lo siguiente de la vivienda del informante:

- - - - - -

A. 4 ¿De qué material es el techo?
1 [ ] teja 3 [ ] paja
2 [ ] calamina 4 [ ] eternit

A. 5 ¿De qué material es el piso?
1 [ ] tierra 3 [ ] cemento
2 [ ] madera 4 [ ] tierra y cemento

A. 6 ¿Cuantas habitaciones hay en la case del informante?
[ ] habitaciones (solo contar dormitorios, sala y cocina)

****

B. Historia Personal del Promotor

B. 1 El promotor, ¿es hombre o mujer? 1 [ ] mujer 2 [ ] hombre

B. 2 ¿Qué edad tiene usted? [ ] años

B. 3 ¿Cuál es su estado civil?
1 [ ] casado 2 [ ] soltero 3 [ ] viudo
4 [ ] divorciado 5 [ ] conviviente

B. 4 ¿Cuantos hijos tiene usted? [ ] no. de hijos

B. 5 ¿Hasta qué año ha estudiado en la escuela?

_____

B. 6 ¿Cuanto tiempo vive usted en esta comunidad? [ ] no. de años

B. 7 ¿Aparte del castellano, ¿qué otros idiomas habla usted?
1 [ ] quechua 2 [ ] ayamara 3 [ ] otro _____ (especifique)
4 [ ] otro _____ (especifique)

B. 8 ¿Cuál es el idioma principal que se habla en esta comunidad?
1 [ ] castellano 2 [ ] quechua 3 [ ] aymara 4 [ ] otro _____ (especifique

B. 9 Aparte del castellano, ¿qué otro idioma habla la gente?
1 [ ] quechua 2 [ ] ayamara 3 [ ] otro _____ (especifique)
4 [ ] otro _____ (especifique)

B.10 ¿Cuál es su trabajo principal que le dá el dinero para mantenerse?
1 [ ] agricultura para consumo propio 2 [ ] agricultura comercial
3 [ ] independiente 4 [ ] ambulante 5 [ ] ama de casa
6 [ ] trabajo no asalariado 7 [ ] otros _____ (especifique)

B.11 ¿Hay alguien de su familia que trabaja en salud?
1 [ ] si 2 [ ] no

B.12 ¿Cuanto tiempo ha estado trabajando como promotor en esta comunidad?
1 [ ] meses 2 [ ] años

B. 13 ¿Trabajó usted en actividades de salud antes de recibir el curso de capacitación? 1 [ ] si 2 [ ] no (pase a sección C)

B. 14 ¿En qué actividad de salud ha trabajado antes de recibir el curso de capacitación?
1 [ ] curandero 2 [ ] yerbatero 3 [ ] partero 4 [ ] huesero
5 [ ] comité de salud 6 [ ] otro

B. 15 ¿Continua usted en esta actividad ahora?
1 [ ] si 2 [ ] no

****

C. Preguntas sobre Capacitación

- - - - - -

"Quiero que me dé algunos datos sobre sus experiencias con cursos de capacitación. Piense un momento para recordar todas sus actividades de capacitación."

"También quiero saber todos los tipos de cursos que ha recibido usted, las fechas de terminación, la duración de los cursos y las entidades responsables."

- - - - -

[*Solicite documentos (certificado de asistencia a cursos)]

Cuadro 1: Capacitación

tipo de curso r = refrescamiento c = capacitación	fecha de terminación	duración no. de días	entidad responsable

C. 1 ¿Como lo seleccionaron para que usted sea el promotor de esta comunidad? _____

C. 2 ¿Por qué lo eligieron a usted como promotor? _____

C. 3 ¿Cree usted que el curso de capacitación fué adecuado para tratar los problemas de salud encontrados en su comunidad?
1 [ ] si 2 [ ] no

C. 4 ¿Qué piensa usted que es necesario para resolver los problemas de salud? _____

C. 5 ¿Qué son cursos de refrescamiento? _____

C. 6 Después de su capacitacion como promotor, ¿ha recibido usted otros cursos de salud? 1 [ ] si (pase a D.1) 2 [ ] no

C. 7 ¿Por qué no ha asistido usted a ningun curso de refrescamiento? _____

****

D. Actividades

D. 1 ¿Da usted charlas a la comunidad? 1 [ ] si 2 [ ] no (pase a D.5)

D. 2 ¿Como encuentra o reune usted a la gente para poder darles charlas? _____

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D. 3 ¿Cuanto tiempo hace que ha dado usted una charla sobre salud?

[ ] días [ ] meses [ ] años

D. 4 ¿Sobre que temas ha dado usted charlas en los últimos 6 meses?

1[ ] saneamiento ambiental 2[ ] higiene personal
3[ ] salud materno-infantil 4[ ] paternidad responsable
5[ ] nutrición 6[ ] transmisión de enfermedades infecciosas
7[ ] otras

D. 5 ¿Cuantas letrinas hay en la comunidad? [ ] número

D. 6 ¿Cuantas letrinas se han instalado con su ayuda?

[ ] número [pase a D.8]
[ ] ninguna

D. 7 ¿Por qué no ha instalado letrinas en su comunidad?

_____
_____
_____

D. 8 ¿De donde consigue el agua para su casa?

1[ ] pozo 2[ ] río 3[ ] pilas 4[ ] manantial 5[ ] acequias

D. 9 ¿Ha ayudado usted en la instalacion de agua potable?

1[ ] si 2[ ] no [pase a D.11]

D. 10 ¿Como ha ayudado usted en la instalación del agua potable?

_____
_____
_____

D. 11 Dígame que vacunas debe de recibir el niño, indique la vacuna, la edad del niño y la dosis.

Cuadro 2 Vacunaciones

Vacuna	Edad del niño	Número de dosis

D. 12 ¿Qué tipo de vacuna deben de recibir las madres gestantes?

1. [ ] (nombre de la vacuna)
2. [ ] no sé

- - - - - - -

Entrevistador - para la siguiente pregunta, pregunte al promotor: (a) si tiene experiencia en las actividades 1,2,3,...16; (b) si tiene guías o manuales educativos para cumplir mejor las actividades antes mencionadas; (c) cual es para él el grado de importancia que tienen estas actividades. 1-la primera en importancia, 2-muy importante, 3-importante, 4-no importante; (d) si recibió durante su capacitación instrucciones para cumplir con estas actividades.

D. 13 Cuadro 3: Actividades

Actividad	Hace si/no	Guías/ Manuales si/no	Grado de Importancia 1-4	Recibio capacitación si/no
1 organiza huertos familiares				
2 organiza reuniones comunales				
3 obras de disposicion de excretas y basuras				
4 atención de primeros auxilios				
5 control de embarazadas				
6 refiere niños para inscribir en el registro civil				
7 aplicacion de medicamentos inyectables				
8 cuidado de niños con diarrea				
9 charlas educativas				
10 orienta a las gestantes sobre nutrición				
11 refiere casos de turberculosis				
12 colaboracion en vacunaciones				
13 toma muestra sangre (gota gruesa) o lámina para malaria o paludismo				
14 informa sobre rabia				
15 enseña madres sobre lactancia y primeras comidas del niño				
16 orienta sobre planificación familiar				

D. 14 ¿Cuál es para usted la actividad mas importante de toda la lista?

_____

D. 15 En su capacitacion, ¿qué temas cree usted que deben ser ampliados para ayudar mejor a su comunidad? _____

_____

- - - - -

Entrevistador - No indique usted al informante los síntomas que se mencionan, escuche y marque las respuestas.

- - - - -

D. 16 ¿Como se reconoce a un niño deshidratado?

1 [ ] piel arrugada 2 [ ] ojos hundidos
3 [ ] sed intensa 4 [ ] boca seca
5 [ ] dolor abdominal 6 [ ] falta de apetito
7 [ ] sangre en heces 8 [ ] heces líquidas más de dos veces al día
9 [ ] vómitos 10 [ ] fiebre
11 [ ] pérdida de peso 12 [ ] fontanela hundida
13 [ ] no sé 14 [ ] otro _____ (especifique)

D. 17 ¿Que se debe de hacer para curar la diarrea?

1 [ ] dar sales rehidratantes 2 [ ] dar el suero casero
3 [ ] dar jarabe antidiarréico 4 [ ] no sé
5 [ ] otro _____ (especifique)

D. 18 ¿Qué consejos da usted a madres sobre la alimentación de niños menores de dos años cuando ellos tienen diarrea?

1 [ ] siga con la alimentacion materna 2 [ ] dé solo líquidos
3 [ ] quite la alimentación totalmente por 24 horas 4 [ ] no sé
5 [ ] otro _____ (especifique)

D. 19 Mencione tres actividades que la madre puede realizar para evitar diarrea en los niños

1 [ ] hervir el agua
2 [ ] lavar las manos de los niños antes de que coman y después de ir al baño
3 [ ] proteger la comida de insectos y tierra
4 [ ] mantener la casa limpia

D. 20 ¿Qué puede hacer una madre cuando el niño tiene fiebre?

1 [ ] quitarle ropa 2 [ ] friccionar el cuerpo con alcohol
3 [ ] otro _____ (especifique)

D. 21 ¿Conoce usted algunos de los signos de alarma durante un embarazo que le permitan saber cuando debe mandar a la madre gestante a los servicios de salud?

1 [ ] fiebre 2 [ ] perdida de sangre por sus partes
3 [ ] mareos 4 [ ] vomitos constantes 5 [ ] hinchazones
6 [ ] ataques 7 [ ] dolores de cabeza fuertes
8 [ ] ausencia de movimientos fetales
9 [ ] pérdida de líquido por sus partes
10 [ ] no sé 11 [ ] otro _____ (especifique)

D. 22 ¿Qué debe de hacer el promotor antes de atender un parto?

1 [ ] lavarse y cepillarse las manos 2 [ ] hervir las tijeras
3 [ ] palpar el vientre del paciente 4 [ ] no sé
5 [ ] lavar bien las partes de la madre con agua y jabón
6 [ ] otro _____ (especifique)

- - - - -

Entrevistador - No indique al informante los síntomas que no mencionan, escuche y marque las respuestas.

- - - - -

D. 23 Según su experiencia, ¿cuando debe enviar al recién nacido a los servicios de salud?

1 [ ] cuando no llora 2 [ ] nació antes de ocho meses
3 [ ] tiene la piel amarilla 4 [ ] tiene malformaciones
5 [ ] dificultades al respirar 6 [ ] bajo peso
7 [ ] no sé 8 [ ] otro _____ (especifique)

D. 24 ¿Cuales son los síntomas de la tuberculosis?

1 [ ] sudoración nocturna 2 [ ] falta de apetito
3 [ ] tos productiva 4 [ ] pérdida de peso
5 [ ] no sé 6 [ ] otro _____ (especifique)

D. 25 ¿Sabe usted cuantos pacientes tiene con tuberculosis en su comunidad? [ ] no tiene pacientes con t.b. [ ] no. de pacientes

D. 26 ¿Hace usted la transferencia de pacientes?

1 [ ] si 2 [ ] no [pase a D.30]

D. 27 Durante el último mes, ¿cuantos pacientes ha transferido usted al

1. centro de salud [ ] no. de pacientes
2. posta sanitaria [ ] no. de pacientes
3. hospital local [ ] no. de pacientes
4. hospital regional [ ] no. de pacientes

D. 28 ¿Por qué los ha transferido? _____

_____

D. 29 ¿Maneja usted tarjetas de transferencia? 1 [ ] si 2 [ ] no

D. 30 ¿Cuales son las tres enfermedades mas comunes que le consultan?

[anotar edad del paciente]	Edad

D. 31 ¿Cuantos partos ha atendido en el año pasado? [ ] no. de partos

D. 32 ¿Qué es paternidad responsable? _____

_____

_____

D. 33 ¿Qué es planificacion familiar? _____

_____

_____

D. 34 ¿Hay gente en la comunidad que le pide información sobre planificación familiar? 1 [ ] si 2 [ ] no [pase a D.36]

D. 35 ¿Cuantos y que tipo de materiales entrega usted al mes para planificacion familiar?

1 [ ] no. de condones 2 [ ] no. paquetes de píldoras
3 [ ] no. tabletas vaginales 4 [ ] otros materiales
5 [ ] no entrega ningun material para planificación familiar

D. 36 ¿Sabe usted que es un comité de salud?

1 [ ] si 2 [ ] no [pase a D.42]

D. 37 ¿Existe un comité de salud en la comunidad?
1 [ ] sí 2 [ ] no (pase a D.42)

D. 38 ¿Trabaja usted con el comité de salud de la comunidad?
1 [ ] sí (pase a D.40) 2 [ ] no

D. 39 ¿Por qué no trabaja usted con el comité de salud?

_____
_____
_____
_____

D. 40 ¿Colaboró usted en la organización del comité de salud?
[ ] sí [ ] no

D. 41 ¿Quienes son los miembros del comité de salud, y qué hacen?

_____
_____
_____
_____
_____

D. 42 ¿Qué es un botiquín comunal?

_____
_____
_____

D. 43 ¿Hay un botiquín comunal en la comunidad?
1 [ ] sí 2 [ ] no (pase a D.45)

D. 44 Si hay un botiquín comunal, ¿quién tiene la responsabilidad de control sobre los medicamentos? _____
_____
_____
_____

D. 45 Si no hay un botiquín comunal, ¿sabe usted si había antes, y por qué dejo de funcionar? _____
_____
_____

****

E. Supervisión del Promotor

E. 1 ¿Quién le visita con más frecuencia?
1. nadie me ha visitado [ ] (pase a E.4)
2. sanitario del puesto de salud [ ]
3. enfermera del centro de salud [ ]
4. personal del area [ ]
5. otro _____ (especifique) [ ]

E. 2 ¿Con qué frecuencia le visita alguien del centro de salud?
cada [ ] meses

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E. 3 ¿Qué hacen estas personas cuando le visitan?

1. preguntan sobre su trabajo ☐
2. le enseñan nuevos métodos ☐
3. le critican duramente ☐
4. copian y recogen datos ☐
5. le abastecen de materiales y medicinas ☐
6. otro _____ ☐
   (especifique)

E. 4 ¿Con qué frecuencia visita usted el ☐?

1. puesto de salud	☐	☐
2. centro de salud	☐	☐
3. hospital local	☐	☐
4. hospital del area	☐	☐
5. otro _____ (especifique)	☐	☐
6. casi nunca voy	☐	

****

F. Sistema de Información

F. 1 ¿Mantiene usted copias escritas de sus actividades de salud?

1 ☐ si 2 ☐ no [pase a la sección G]

F. 2 ¿Cuales?

1. registro de pacientes ☐
2. dosis y tipo de medicamentos ☐
3. otro _____ ☐
   (especifique)

****

G. Costos de las Actividades del Promotor

G. 1 ¿Cuanto cobra usted por los siguientes?

1. atención	☐	soles
2. primeros auxilios	☐	soles
3. inyecciones	☐	soles
4. medicinas	☐	soles
5. parto	☐	soles
6. distribución de alimentos	☐	soles
7. otro _____ (especifique)	☐	soles

G. 2 ¿Quién estipula los precios que cobra usted?

1. yo mismo ☐
2. sanitario ☐
3. comité de salud ☐
4. centro de salud ☐
5. hospital local ☐
6. hospital regional ☐
7. otro _____ ☐
   (especifique)

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G. 3 ¿De donde consigue usted sus materiales y medicamentos?

Lugar	Materiales y/o medicamentos	Soles/Mes	Frecuencia
Puesto de salud			
Centro de Salud			
Hospital Regional			
Bodega			
Botiquín Comunal			
Farmacia			
otro _____ (especifique)			

G. 4 ¿Cuantos días a la semana trabaja usted como promotor? [ ] días

G. 5 ¿Cuantas horas al día trabaja usted como promotor? [ ] horas

G. 6 De todas las horas que trabaja usted como promotor, ¿cuanto tiempo pasa usted en cada una de las siguientes actividades en 2 semanas?

1. atenciones para curaciones [ ] horas
2. charlas sobre nutrición [ ]
3. charlas educativas de salud [ ]
4. planificación familiar [ ]
5. saneamiento ambiental [ ]
6. reuniones [ ]
7. visitas domiciliarias [ ]
8. otro _____ [ ]
   (especifique)

G. 7 ¿Qué recibe usted por sus actividades como promotor?

1. dinero _____ soles /mes
2. regalos _____ cuantos y cuales
3. librarse de minga _____ horas
4. otro _____
   (especifique)

G. 8 ¿Cuantas inyecciones ha puesto usted el mes pasado?

[ ] número

G. 9 Deme una lista ordenada por tipo y cantidad de las 5 medicinas que inyecta con más frecuencia

	tipo	frecuencia/mes
1.		
2.		
3.		
4.		
5.		

G. 10 ¿Le quita tiempo de sus otras actividades económicas su trabajo como promotor? 1[ ] si 2[ ] no (pase a sección H)

G. 11 ¿Le disminuye sus ganancias? 1[ ] si 2[ ] no (pase a sección H)

G. 12 ¿Cuanto le disminuye? _____ soles/mes

****

H. Percepción del Promotor Activo

H. 1 ¿Le gusta trabajar como promotor? 1[ ] si 2[ ] no (pase a H.3)

H. 2 ¿Por qué? _____

H. 3 ¿Por qué no? _____

H. 4 ¿Planea usted continuar trabajando como promotor o está pensando en cesar en un futuro próximo?
1[ ] continuar 2[ ] cesar

H. 5 ¿Por qué? _____

H. 6 ¿Conoce usted personalmente a algún promotor que ya no trabaja como tal? 1[ ] si 2[ ] no (pase a H.8)

H. 7 ¿Sabe usted por qué dejaron de ser promotores?
1. demasiado trabajo [ ]
2. no recibían pago [ ]
3. interfería con otro trabajo [ ]
4. no les gustaba [ ]
5. otro _____ [ ]
(especifique)

H. 8 ¿Cuál piensa usted que es la función más importante del promotor de salud? _____

H. 9 ¿Cuál es el problema más importante que tiene usted como promotor?

1. falta de pago ☐
2. trabajo duro ☐
3. falta de apoyo de la comunidad ☐
4. falta de medicamentos y materiales ☐
5. falta de tiempo ☐
6. otro _____ ☐
   (especifique)

H. 10 ¿Cuales son los problemas más importantes que enfrenta esta comunidad? _____

_____

_____

_____

_____

****

I. Equipo, Materiales y Medicinas

I. 1 Equipos para promotores

	Hay (indique cantidad)	Ha tenido antes ahora no hay	Nunca ha tenido
1. Primus			
2. Termómetro oral			
3. Termómetro rectal			
4. Olla de Aluminio 4 lts.			
5. Jeringa Hipodérmica 5cc			
6. Jeringa Hipodérmica 10cc			
7. Agujas Hipodérmicas 22x1½			
8. Agujas Hipodérmicas 20x2½			
9. Tijeras rectas			
10. Pinza Kocher			
11. Pinza de Disección			
12. Pinza de Kelly			
13. Tambor para gasa			
14. Cubeta con tapa 30x25x4			
15. Linterna de mano			
16. Pilas			
17. Cepillo para manos			
18. Cinta métrica			
19. Maletín o mochila			

I. 2 Material de Curaciones

	Hay (indique cantidad)	Ha tenido antes ahora no hay	Nunca ha habido
1. Alcohol yodado			
2. Bencina			
3. Sulfa en polvo			
4. Picrato de butesin			
5. Algodón			
6. Gasa			
7. Esparadrapo			
8. Jabón germicida			

I. 3 Medicinas

	Hay (indique cantidad)	Ha habido	Nunca ha habido	Uso si/no
1. Atropina sulfato				
2. Dimenhidrinato				
3. Homatropina				
4. Hioscina N-Butil Bromuro				
5. Dipirona				
6. Sulfametoxipiridazina				
7. Unguento a base de heparinoide				
8. Aspirina				
9. Dipirona				
10. Malox				
11. Pepsamar				
12. Aldrox				
13. Antidiarréico sin neomicina				
14. Multivitamínico				
15. Acido Undecilenico				
16. Undecilinato de Zinc				
17. Dexametazona				
18. Glucanato Ferroso				
19. Fitiquinona				
20. Gotas oticas				
21 Fenobarbital				
22. Tiabendazol				
23. Bronhidrato de Dextrometorfano				
24. Clorofeniramina maleato				
25. Ciproheptadina				
26. Lidocaina				
27. Ergometrina				
28. Penicilina				
29. Condones				
30. Tabletas vaginales (neo sampoon)				

****

H. Percepción del Promotor Pasivo [si el promotor no está trabajando ahora pregunta las siguientes:]

H. 1 ¿Le gustó a usted trabajar como promotor?

1 ☐ sí 2 ☐ no [pase a H.3]

H. 2 ¿Por qué?

_____
_____
_____
_____
_____

H. 3 ¿Por qué nó?

_____
_____
_____
_____
_____

H. 4 ¿Por qué dejó de trabajar como promotor?

_____
_____
_____
_____
_____

H. 5 ¿Cuál piensa usted que es la función más importante del promotor de salud? _____
_____
_____

H. 6 ¿Cuál fué el problema más importante que tenía usted como promotor de salud?

1. falta de pago ☐
2. trabajo duro ☐
3. condiciones difíciles ☐
4. falta de medicamentos y materiales ☐
5. falta de viáticos para trabajar ☐
6. falta de tiempo ☐
7. otro _____ ☐
   (especifique)

****

Observaciones del Entrevistador:

Nombre del Entrevistador _____

Nombre del Entrevistado _____

Grado de Cooperación del Promotor:

1. muy bueno ☐
2. bueno ☐
3. regular ☐
4. malo ☐

Comentarios:
(condiciones de la casa; comprensión y manera de responder del entrevistado a las preguntas; y problemas con algunas preguntas en especial)

_____
_____
_____
_____

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Bosquejo de los Temas para Entrevistas con el Personal Regional de Salud

Jefe de la Región de Salud
Enfermera Jefe
Coordinador/a de Atención Primaria
Jefe de la Unidad de Capacitación
Jefe del Area Hospitalaria
Personal Docente
Enfermera a Cargo del Centro de Salud
Personal Encargado de la Supervisión de Promotores

I. Ideas sobre el papel del promotor en relación al sistema de Salud, enfermedades y problemas principales.

II. Rol del promotor en las siguientes actividades:

A. Desarrollo comunal
   1. Formación del Comité de Salud
   2. Censos comunales
   3. Formulación y desarrollo de proyectos
   4. Organización y mantenimiento de un Botiquín Comunal
   5. Registro de nacimientos, defunciones y migración

B. Actividades relacionadas con alimentación y nutrición

C. Saneamiento básico
   1. Mejoramiento y mantenimiento del abastecimiento de agua
   2. Disposición de excretas y basuras
   3. Mejoramiento de viviendas

D. Control de enfermedades transmisibles
   1. Vacunaciones
   2. Tuberculosis - diagnóstico y tratamiento
   3. Malaria - diagnóstico y tratamiento
   4. Rábia

E. Vigilancia epidemiológica

F. Atención materno-infantil
   1. Salud de la madre
   2. Salud del niño
      a. Niño sano
      b. Niño enfermo
G. Primeros auxilios
H. Curaciones
I. Administración de medicamentos
J. Transferencia de enfermos a Puestos y Centros de Salud
K. Planificación familiar, control de natalidad, paternidad responsable

III. Habilidad de los promotores en atención primaria
   A. Curaciones
   B. Actividades preventivas
   C. Actividades educativas

IV. Conceptos sobre conveniencia de:
   A. Selección de promotores
      1. Criterio de edad, sexo, estado civil
      2. Criterio de usar curanderos
   B. Capacitación de promotores
      1. Cuantos han sido suspendidos en el examen
      2. Disponibilidad de personal docente
      3. Cambios en los últimos 10 años
   C. Supervisión
      1. Disponibilidad y calificación del personal
      2. Métodos, problemas específicos, frecuencia, actas, quién recibe la información, como afecta al promotor.
   D. Refrescamiento

V. Ideas sobre costos de capacitación, refrescamiento y supervisión de promotores en relación con las necesidades de salud de la región

VI. Costo de las actividades del promotor
   A. Equipo y material de curaciones
   B. Medicinas
   C. Transporte
      1. Pagado por quién

D. Supervisión
   1. Viáticos
E. Promotor
   1. Visitas al Puesto o Centro de Salud
   2. Viáticos

VII. Percepción de la adecuacia del abastecimiento de equipo, materiales de curaciones y medicinas al promotor

VIII. Deserción de promotores
   A. Explicación
   B. Promedio de tiempo que trabajaron
   C. Ideas y sugestiones para disminuir la deserción
   D. Incentivos

IX. Ideas sobre la relación entre promotores, sanitarios y otros miembros del personal de salud

X. Aspiraciones del promotor

XI. Opinión sobre pagar sueldos a los promotores

XII. Como están relacionados los varios niveles de salud con los promotores
   A. Dirección Regional
   B. Area Hospitalaria
   C. Centro de Salud
   D. Puesto de Salud

   En relación a:
   A. Medicinas
   B. Equipo y materiales de curación
   C. Capacitación
   D. Refrescamiento
   E. Supervisión
   F. Entrega de información

XIII. Ideas sobre la importancia de apoyo y participación comunal en las actividades del promotor

XIV. Contribuciones de los promotores al sistema de atención primaria de la región

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APENDICE F. ENTREVISTA AUXILIARES DE ENFERMERIA Y TECNICOS SANITARIOS

1. ¿Cual es el papel del promotor en el sistema de salud? (curaciones, planificación familiar, campañas preventivas, charlas, etc).

2. ¿Cual cree usted que debería ser la misión del promotor en la comunidad? (curativa, preventiva, educativa , etc). ¿Por qué?

3. ¿Quién cree usted que es más efectivo como promotor, un hombre o una mujer? ¿Por qué?

4. ¿Que opina usted sobre capacitar como promotores a personas que practican la medicina tradicional, tal y como curanderos, yerbateros, hueseros, etc?

5. ¿Conoce usted a algún promotor que practicaba la medicina tradicional antes? ¿Qué hacía?

6. ¿Como deben de ser seleccionados los promotores? (qué criterio se se debe de utilizar, qué cualidades deben de tener).

7. ¿Sabe usted como se hizo la selección del promotor de su comunidad, o de otra?

8. ¿Sabe usted como se capacita a un promotor?

9. ¿Ha participado usted alguna vez en la capacitación de un promotor? ¿Como?

10. ¿Qué cree usted que se le debe de enseñar al promotor al capacitarlo?

11. ¿Qué opinión tiene usted sobre la capacitación de los promotores? (buena, regular, mala, inadecuada, insuficiente) ¿Por qué?

12. ¿Qué piensa usted de las lecturas, teoría, práctica, charlas, discusiones en grupo, manuales, etc., que se utilizan para capacitar al promotor?

13. ¿Como se podría mejorar esta capacitación?, ¿qué otros aspectos se deberían de tratar/añadir al curriculum?

14. ¿Cree usted que después de su capacitación los promotores están preparados para dar primeros auxilios, diagnosticar diarreas, malaria, enfermedades respiratorias, atender partos, etc?

15. ¿Cree usted que el promotor debe tener y administrar medicamentos?

16. ¿Cree usted que el promotor debe de poner inyecciones? ¿Por qué?

17. ¿Sabe usted si los promotores que conoce cobran por sus servicios? (aparte de las medicinas)

18. ¿Cree usted que deberían de cobrar algo? ¿Por qué?

19. ¿Cree usted que los promotores deberían de recibir un sueldo oficial

20. ¿Que tal son sus relaciones con los promotores?

21. ¿Entienden bien sus instrucciones?

22. ¿Coordinan ustedes sus actividades? (tal y como vacunaciones, otros)

23. ¿Se ha convertido alguno de los promotores que usted conoce en sanitario, trabajador de salud o estudiante de enfermería? ¿en qué?

24. ¿Quiere alguno de los promotores que usted conoce convertirse en sanitario, trabajador de salud o estudiante de enfermería? ¿en qué?

25. ¿Cual es la razón principal por la que los promotores abandonan su trabajo en salud?

26. ¿Qué se podría hacer para evitar la deserción de los promotores?

27. ¿Transfieren los promotores a los pacientes al Puesto de Salud o al lugar adecuado? ¿por qué razones?

28. ¿Le informa el promotor sobre sus actividades?

29. ¿Cuales son los problemas de salud de la comunidad que principalmente debería de atender el promotor?

30. ¿Cree usted que los promotores han tenido algún impacto o han conseguido alguna mejora para las comunidades en las que trabajan? ¿en qué aspecto?

31. ¿Cuales son los problemas más graves que tienen las comunidades en las que trabajan los promotores? (en general: económicos, de salud, políticos, etc.).

APPENDIX G

THEMES FOR CASE STUDIES

I. Background Information

A. General Background and Available Statistical Information

1. total numbers of promoters trained

2. growth of health resources in the area from 1979-1984

3. utilization data (regional statistics office)

   a. home visits
   b. family education
   c. improvement in environmental sanitation
   d. family planning programs
      -patients on pills
      -patients on condoms
      -patients on other means
   e. first aid encounters
   f. referrals:
      mothers
      children
      others
   g. injections given
   h. dressings ("curaciones")
   i. deliveries
   j. other

4. numbers of promoters reports vs. those not reporting

5. drug utilization for the numbers of promoters reporting medicines used (actual numbers of pills, or items)

   a. "oralyte" and other rehydration salts
   b. iron
   c. antiparasiticals
   d. antispasmodics
   e. aspirin
   f. oral contraceptives (cycles)
   g. condoms
   h. others

B. Training Programs: Past and Present

1. short history

C. Activities of Health Promoter for last 6 Months

1. no. of home visits

   a. diarrhea/rehydration talks
   b. nutrition talks
   c. parasitology talks
   d. environmental sanitation efforts
   e. family planning encounters
   f. first aid (clarify)
   g. referrals
   h. drugs dispensed
   i. other

2. (injections and dressing changes not included in summary)

   a. family planning visits
   b. pregnancy checks
   c. well-baby care
   d. post-partum checks
   e. sick-child checks
   f. meetings with health personnel
   g. visits received by health personnel
   h. malaria samples

D. Basic Data on Community

1. population
2. area
3. economic activities
4. in- and out- migration
5. climate
6. language
7. cost of transportation to reach each health facility

E. Promoter's Daily Schedule

1. follow step no. 3 (page 1) for daily activity schedule
   a. how much time devoted to each activity? observation
   b. quantify and qualify by taking promoter's data from his own written records, aggregate data (from AHA) and observation of time spent on each activity during 4-5 day observation
2. observe patient's reaction to treatment
3. record promoter's remarks about patient: e.g., was the promoter optimistic about patient's compliance with his advice?
4. observe preparation and administration of therapeutic agents
5. observe method of storage and transportation of medicinal supplies
6. observe promoter's personal hygiene when administering treatment: e.g., does the promoter wash hands before treating a wound?

7. observe promoter's living area and ascertain if there is a specific area devoted to patient care
8. observe record-keeping activities, copy lists for last 6 months
9. how are treatments paid for?
10. does the promoter use a manual? does he or she follow it?

F. Promoter's Life History

1. record pertinent data
2. family history of health providers?
3. conflicts with family members over health activities?

G. Promoter's Self Image as a Health Provider

1. promoter's concept of the utilization of his services by community members: does the promoter feel under- or over-utilized?
2. probe promoter satisfaction in relation to own self-image as an effective health provider
3. does the promoter feel content with his or her obligations to provide as well as curative services?

H. Promoter's Interaction with Other Health Providers and MOH Personnel

1. relation with traditional healer
2. what is the promoter's view of interactions with local sanitarios? competitive, helpful, neutral?
3. what interactions have occured between promoter and local private practice physicians?
4. attitude of promoter toward role in other MOH activities such as malaria or vaccination campaigns
5. experiences with supervision (quality and quantity)
   drug supply from MOH vs. local pharmacies
   patient referrals (narrative)

I. Community Interaction

1. support from the community, economic, morale, etc.
2. comite de salud experiences: e.g., did they influence selection? do they manage a communal drug supply for him or with his assistance?
3. experiences with local pharmacists, narrative
4. perception of community problems and needs
   a. health
   b. economic
   c. political
5. talk to community leaders about what their perceptions of what promoter ought to be doing: are they satisfied with their promoter experiences?

J. Economic Issues

1. price lists
   a. services
   b. are prices fixed or do they vary according to patients ability to pay?
2. Record of sales
   a. major item unit price
   b. total revenue collected during the previous month

K. Promoter's View of Training Experiences and Refresher Activities

1. personal opinion of training experience
2. awareness of refresher courses
3. experiences with refresher courses
4. personal view on curriculum
5. personal view on course content
6. history of continued interaction with trainers
7. what were reasons for either taking or not taking refresher courses?
8. how was the promoter selected?

L. Incentives

1. fees for services rendered. is this considered as an incentive by the promoter?

2. personal esteem as perceived by promoter from his status as a health provider, e.g., did the promoter feel that after the course his or her esteem in his community increased? was the promoter asked to serve in any prestigious community activities after the course?

3. what does the promoter feel are reasonable incentives to continue his activities?

4. does MOH salary or ability to become a MOH employee influence promoter activities? does the promoter see them as a means to reach other jobs in the MOH? is salary an issue?

M. Plans To Continue Work as a Promoter

1. what were the reasons that the promoter originally entered the program? was the promoter influenced by comite de salud pressure or community leaders? did he or she willingly participate?

2. have the promoter's initial desires and aspirations been filled?

3. future plans for health care activities?

4. does the promoter see his or her role as temporary or as a long-term or permanent activity?

P

CODIFICACION - PROMOTOR

Tarjeta 1

Var.	Preg.		Columna
1	A1	Región de Salud	6
		0 no información	
		1 Piura-Tumbes	
		2 San Martin	
		3 Huánuco-Pasco-Ucayali	
		4 Callao	
		5 Ica	
		6 Arequipa	
		7 Puno	
		8 Ancash	
2	A1	Area Hospitalaria	7 8
		0 no información	
		1 Piura	
		2 Sullana	
		3 Moyabamba	
		4 Tarapoto-Lamas	
		5 Pucallpa	
		6 Tingo Maria	
		7 Chacay	
		8 Collique	
		10 Ica-Palpa-Nazca	
		11 Pisco-Castrobirreyna	
		12 Arequipa	
		13 Castilla	
		14 Melgar-Carabaya	
		15 Puno-Chucuito	
		16 Huaraz	
		17 Pomabamba	
3	A1	Comunidad, caserío, vecindad	9 10 11
		Región Piura - AHA Piura	
		1 Rio Viejo Sur	
		2 Sta. Elena (Casa Grande)	
		3 Chaquira "	
		4 Vichayal "	
		5 Alto de los Carillos "	
		6 Alto de la Cruz "	
		7 Loma Negra Sur "	
		8 Paredones (Simbila)	
		10 Mocora "	
		11 Monte Castillo "	
		12 Simbila "	
		13 Molino Azul "	
		14 La Piedra "	
		15 La Arena (La Arena)	
		16 Monte Redondo "	
		17 El Penal "	
		18 Nuevo Tamarindo "	
		19 Pampa de los Silvas " Asentamiento 13 de Abril	
		20 Alto de los Mores "	
		21 Monte Grande "	
		22 Alto de los Castillos "	
		23 Canisal Chico "	
		24 Chatito "	
		Región Piura - AHA Sullana	
		36 La Bocena (Miramar)	
		37 Miramar "	

Tarjeta 1

Var.	Preg.		Columna
3	A1	Comunidad, caserío, vecindad	9 10 11

Región Piura - AHA Sullana (con't)

38 Cas. San Luis (Miramar)
39 Tamarindo (San Pedro)
40 Tamarindo (Monte Lima)
41 Ignacio Escudero "
42 Tamarindo (La Libertad)
43 Mallaritos "
44 Mallares (Mallaritos)
45 Mallaritos (La Quinta)

Región San Martín - AHA Moyobamba-Rioja

61 Rafael Belaunde
62 José Gáluce
63 Nvo. Tabalosos
64 Nva. Esperanza
65 Pioneros
66 Porvenir
67 Mirador
68 Yarinal
69 Tumbaro
70 Ochame
71 Sinamal
72 Shimpiyacu
73 Perla Mayo
74 Alto Naranjillo

Región San Martín - AHA Tarapoto-Lamas

90 Shapumba
91 Auca Loma
92 Garrapata
93 Pucayacu
94 Panjui
95 Huimbamuyuna
96 3 de Octubre
97 San Fernando
98 Carañayaco
99 Pampa Hermosa
100 Vista Alegre
101 Pampa Jacu
102 San Martin de Cumbaza
103 San Juan de Tallicuihiu
104 Santa Cruz
105 Nuevo Mundo
106 Huapo
107 Huayco
108 Alto Shamboyacu
109 Bellavista
110 Poloponta

Región Huánuco - AHA Pucallpa

126 Nuevo San Lorenzo (C. nativa)
127 Belgica
128 Nueva Unión
129 Campo Grande
130 9 de Octubre
131 Patria Nueva
132 Panaillo
133 Calleria
134 Flor de Ucayali
135 Campo Verde
136 Nuevo Saposa (C. nativa)
137 Los Milagros

2,351

Tarjeta 1

Var.	Preg.
3	A1

3

Columna

9 10 11

Comunidad, caserío, vecindad

Región Huánuco - AHA Tingo Maria

149 San Andrés
150 San Juan Tulumayo
151 La Colorada
152 Topa
153 Santa Rosa Quezada
154 Cayumba
155 Chagua Nueva
156 Bella Vista
157 Fazo Grande
158 Corvinilla
159 Puerto Prado
160 Pueblo Joven 5 de Nov.
161 La Florida
162 Pendencia
163 La Roca
164 Camote
165 Bella Alta
166 Manchurio
167 Inuti

Región Callao - AHA Chacay

179 Ravira
180 Vicha y Cocha
181 Chauca
182 Pirca
183 Chisque
184 Cormo
185 Piscocoto
186 Coto
187 Lampian
188 Canchapilca
189 Puna
190 Carac
191 Gramadeles (Gramorales)
192 San Graciano
193 San Miguel
194 Pallac
195 Pueblo Libre
196 Boza
197 Cara Vieja

Región Callao - AHA Collique

212 San Miguel
213 Obrajillo
214 Panamarca
215 Carmen Alto
216 La Juventud
217 Manco Inca

Tarjeta 1
Columna

Var.	Preg.	
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Callao - AHA Collique

218 La Balanza
219 San Gabriel
220 San Ramón
221 Kennedy
222 Primavera
223 San Martin
224 Santa Rosa de Quiveg
225 Yaso
226 Collo
227 Locahuasi
228 Apio Viscas
229 San Buena Bentura
230 Konray

Región Ica - AHA Ica-Palpa-Nazca

245 Caserio el Olivio
246 Caserio Camino de Reyes
247 Caserio Congar
248 Caserio Cerro Prieto
249 P.J. La Angustura
250 Paviña Grande - Pueblo Nuevo
251 Callejon de los Espinos - Pueblo Nuevo
252 Barrio Los Chaipes Callejon- Pueblo Nuevo
253 Pampa de Yatasi - Pueblo Nuevo
254 Pongo las Segarra - Pueblo Nuevo
255 Chuapaco - Pueblo Nuevo
256 Sunampe
257 Huamanguilla
258 Tallamana
259 El Arenal
260 Los Piscontes
261 Los Aquijes
262 Rosario de Yanca
263 Distrito Guadalupe

Tarjeta 1

Var.	Preg.	Columna
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Ica - AHA Pisco-Castrovirreyna

277 Pisco
278 San Clemente
279 Villa Tupac Amaru
280 San Andres

Región Arequipa - AHA Arequipa

296 Tapay y Cosnirhua (Provincia de Caylloma)
297 Huambo "
298 Pinchollo "
299 Cabanaconde "
300 Yanque "
301 Achoma "
302 Coporaque "
303 Maca "
304 Tuti "
305 Callalli "
306 Sibayo "
307 Miguel Grau (Provincia de Arequipa)
308 Mollebaya "
309 Characato "

Región Arequipa - AHA Castilla

325 Ccochapampa (Provincia de Cotahuasi)
326 Pampamarca "
327 Harhua "
328 Mungui "
329 Quillunza "
330 Chupacra (Localidad de Viraco)
331 Tipan "
332 Paracolca "
333 Tagre "
334 Cahuana (Provicia de Cotahuasi)
335 Piramarca "
336 Luicho "
337 Antabamba "

Var.	Preg.	Tarjeta 1 Columna
8	A1	9 10 11

Comunidad, caserío, vecindad

Región Arequipa - AHA Castilla (cont')

338 Visbe (Provincia de Cotahuasi)
339 Achambi "
340 Locrahuanca "
341 Hyanacotas "

Región Puno - AHA Meljar-Caraballa

357 Paylla (Ayaviri #3)
358 Seloue-Macari
359 Ccollama-Macari
360 Umachiri
361 Parc Corani
362 Bajo Ccollana-Macari
363 Jatún-Sayma
364 Isla Kaluzo (Melgar Carabaya #38)
365 Vizcachri
366 Huichullo
367 Cuchoprijo (Nuñoa)
368 Sincata
369 Anchallani
370 Balsapata
371 Isla Malcijo

Región Puno - AHA Puno-Chucuito

387 Cawalla
388 Huilamocco
389 Cari-Cari
390 Chinchera
391 Potojeni Grande
392 Tejquina
393 Pahamaya
394 Unicachi
395 Capaxi
396 Yasin-Huatla
397 Poxin Carata
398 Ticana Cusullaca
399 Chaullacamani (P.S. Chipana)
400 Huety
401 Tara Cancamaya
402 Usasa (P.S. Chipena)
402 Villa Moquere
404 Tapapisi Challampampa
405 Copani
406 Calacoto
407 Parcialidad Molino
408 Ancraruyo-Riva
409 Ancc Puto-Cuarto Corgicha
410 Arasaya-Pizacoma

Tarjeta 1
Columna

Var.	Preg.	
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Puno - AHA Puno-Chucuito (cont')

411 Bajo Airiguas
412 Parco
413 Parco-Sector Arboleda
414 Allavaya
415 Pajana Mohocachi
416 Timicachi-Sihualaya
417 Huayllani
418 Sille Muri

Región Anchash - AHA Huaraz

419 Jirac, Sirac, Dirac
420 Arhcay
421 Shinan
422 Chorrillos
423 Tinco
424 Pumarranga
425 Huino
426 Shirapata
427 Quireahuayi
428 Huashao
429 Encayoc
430 Shancac
431 Canray Chico
432 Jauna
433 Pacchanga
434 Yacup
435 Iscap
436 Cochapampa
437 Tayapampa
438 Ancoraca
439 Chuyo
440 Cantu
441 Cahcpar
442 Huacanhuasi
443 Pariapata
444 Santo Toribio
445 Uchuhuayta
446 Lloclla
447 Cayapampa
448 Shirapata
449 Milluish
450 Pariapata
451 Chavin
452 Marcac
453 Picup
454 Cajapampa

APPENDIX I. INTERVIEWER TRAINING PLAN

The following is a summary of the contents of the training plan developed by the team as a whole and managed and implemented by the Peruvian para-medical member of the team, Mercedes Laredo de Susuki. It is translated here from her original in Spanish.

I. IDENTIFICATION OF THE PROBLEM

II. ORGANIZATION OF THE TRAINING

The training of the sanitarios will be the responsibility of the evaluation team.

DATE: A time-line is presented in Annex 1 to this document..

DURATION: Two days in each Region.

SCHEDULE: 8:00 a.m.-1:00 p.m.
2:30 p.m.-5:30 p.m.

PLACE: The Health Regions or Hospital Areas selected for this purpose.

III. PURPOSE

To train auxiliary nurses and/or sanitarians selected for the administration of interviews in the community and with trained promoters. for the purpose of evaluating the role and activities of the Health Promoter.

IV. GENERAL OBJECTIVES

- Orientation
- Instruction

V. SPECIFIC OBJECTIVES

At the completion of training, the auxiliaries and/or sanitarians will be able to:

a. Correctly use the community and promoter questionnaires.

b. Recognize the importance of the reliability of the information to be obtained through the surveys.

c. Identify the data fields desired in each instrument.

d. Administer the survey instrument to both active and inactive promoters.

e. Administer the survey instrument in the selected communities.

VI. CONTENT

- General concept of the interviews.
- Review and interpretation of the interview schedule to be administered in the community.
- Review and interpretation of the interview schedule to be administered to active promoters.
- Review and interpretation of the interview schedule as it should be administered to inactive promoters (dropouts).
- Classroom practicum in interview administration.
- Survey management in the community.

VII. METHODOLOGY

The training methods to be used will be the following:

- Expository dialogue
- Demonstration (sociodrama)
- Group practice
- Observation of practicums
- Application of the survey instruments in the community.

VIII. RESOURCES

A. Human

- Members of the evaluation team
- Members of the technical team in the selected Health Regions.

B. Material

- Questionnaires for the community
- Questionnaires for promoters
- Office and teaching supplies (pencils, blackboard, etc.)

C. Physical

- Physical space will be provided by the Regional Health Offices and/or Hospital Areas

D. Financial

Each Health Region will be provided with a budget for the following activities:

- Training
- Administration of interviews
- Collection of [completed] interviews.

IX. EVALUATION

Evaluation of the survey process will occur through observation of instrument administration in the classroom and in the community.

In view of the importance to establishing good coordination with the Health Regions and given the importance of supervision of the survey activity, a supervisory nurse will be designated by each Hospital Area.

Signed:

Mercedes Laredo de Susuki
Member, Evaluation Team

AGENCIA PARA EL DESARROLLO INTERNACIONAL
DE LOS ESTADOS UNIDOS EN EL PERU (USAID/PERU)
C/O EMBAJADA AMERICANA
LIMA – PERU

TELEFONO 286200

Enero 23 de 1984

A QUIEN CORRESPONDA:

Por medio de la presente certificamos que la Dra. Polly F. Harrison trabaja bajo contrato en la Agencia para el Desarrollo Internacional de los Estados Unidos (USAID) como Asesora del Ministerio de Salud. La Dra. Harrison permanecerá en el país hasta el 15 de Mayo del presente año.

Agradecemos Anticipadamente cualquier ayuda que se le pueda brindar a la Dra. Harrison.

Jack E. Thrower
Director Administrativo

LETTER OF INTRODUCTION OF EVALUATION TEAM TO REGIONAL HEALTH DIRECTORS

DGSS/DSMIP/No.0238 84

Lima, 8 January 1984

Subject: Evaluation of Health Promoters in Peru

To: Director, __th Health Region, _____ (Region)

From: Director General for Health Services

I am pleased to inform you that the Directorate under my responsibility is carrying out an evaluation of the Promoter Program in Peru.

For that purpose, the Ministry of Health, in coordination with the Agency for International Development (AID, has contracted the services of a research team from Management Sciences for Health (MSH), comprised of the following persons:

Dr. Polly Harrison
Dr. Judith Davidson
Dr. Kjell Enge
Mrs. Pilar Enge.

I will very much appreciate your affording them the facilities necessary for the realization of this study.

The occasion is suitable for repeating to you my greatest appreciation.

Cordially,

Dr. Leoncio Susuki López
Sub-Director General, Directorate for Health Services

JMSF/HFG/JG/mg.
DSMIP/08-01-84

Ministerio de Salud, Dirección General de Servicios de Salud, Dirección de Salud Materno Infantil y Población. MODELO NORMATIVO PARA LA CAPACITACION DE PROMOTORES DE SALUD (Promoter Training Norms). Lima. April 1983.

APPENDIX K

I. BASES LEGALES

- Plan Nacional de Desarrollo 1982-1983
- Plan Operativo del Sector Salud Lima-Perú 1982-1983
- D.L. 17505 - Código Sanitario
- Constitución Política del Estado 1979.
- Resolución Ministerial Nº0153-79-SA/DS, Acciones Educativas en Salud Pública
- Plan Nacional de Acciones Coordinadas de Salud 1982-85
- Atención Primaria de Salud en el Perú - Comisión Nacional de Atención Primaria Lima-Perú 1981.
- Otros.

II. NORMAS ADMINISTRATIVAS

A. Definición del Promotor de Salud

Es un miembro de su comunidad, elegido por la Asamblea representativa para dedicar parte de su tiempo, previo adiestramiento, a actividades de promoción, prevención y primeros auxilios y atención simplificada de salud.

B. Ubicación y Dependencia

El Promotor de Salud forma parte del Primer Nivel de Atención de Servicios de Salud. Depende directamente de su Organización Comunal y recibe asesoría del personal de los Servicios de Salud.
Su ámbito de acción es la comunidad donde desarrolla sus actividades (unidad Comunitaria)

C. Nombre del Curso

Se denomina "Curso de Capacitación de Promotores de Salud".

D. Justificación

Necesidad de ampliar coberturas y promover acciones sanitarias en las comunidades rurales y urbano marginales, prioritariamente, mediante la participación activa de los recursos humanos e Instituciones Comunales.

E. Propósito y Objetivos del Curso

1. Propósito

Contribuir a ampliar las coberturas de atención de salud, mediante la participación activa de los promotores de salud, debidamente capacitados.

2. Objetivos

Al finalizar el Curso los participantes estarán capacitados para:

a. Desarrollar actividades orientadas a la promoción de la comunidad a través de la Estrategia de la Atención Primaria de Salud.

b. Participar en acciones tendientes a mejorar el saneamiento básico, prevención y control de enfermedades transmisibles.

c. Brindar primeros auxilios en casos de emergencias.

d. Realizar acciones de referencia de pacientes y de vigilancia epidemiológica de las enfermedades más comunes.

F. Organismo y Persona Responsable

De acuerdo con los objetivos del Plan Nacional de Desarrollo (Plan Operativo Sectorial), el curso puede ser desarrollado por los diferentes organismos componentes del Sistema Nacional de Servicios de Salud.
La responsabilidad de su ejecución es la del equipo de salud en estrecha coordinación con la Unidad de Capacitación del Area Hospitalaria: la coordinación del mismo puede ejercerla cualquier profesional del Equipo de Salud que haya recibido la orientación correspondiente.

G. Metas de Atención

El número de participantes al curso, no deberá exceder de 20 a fin de garantizar el proceso de enseñanza aprendizaje.

H. Requisitos de Acceso y Mecanismos de Admisión al Curso

1. Requisitos

a. Ser un miembro representativo de su comunidad (de preferencia con un cargo directivo en su organización a fin de garantizar el efecto de demostración y réplica de lo que ha aprendido en el curso).

b. Gozar de buena salud

c. Hablar el idioma o dialecto que predomina en la localidad.

d. Tener ascendencia en la población

e. Saber leer y escribir

2. Mecanismos de Selección

Los representantes del Servicio de Salud informarán a los dirigentes de la Organización Comunal y

a las autoridades formales de la Comunidad, los objetivos y propósitos del curso y propondrán los requisitos para la elección de los candidatos.
La comunidad designará sus candidatos en una Asamblea representativa.

I. Duración y Horario

El curso tendrá una duración estimada de 144 hrs.útiles con un promedio de 36 horas semanales.

J. Sede del Curso

Los cursos se desarrollarán en el establecimiento de salud que reúna los requisitos para el adecuado desarrollo del curso, dándose preferencia a un Centro de Salud.

K. Fecha de Inicio y Término

Será decidido de mutuo acuerdo entre los representantes de la comunidad, los participantes y el Equipo de Salud del área.

L. Recursos Humanos, Económicos y Materiales

1. Los recursos humanos estarán constituídos por:

a. El equipo de Salud del área Hospitalaria

b. Los alumnos y representantes de la comunidad

c. Técnicos y Profesionales de otros sectores comprometidos en el desarrollo de la comunidad.

1.1. Personal Docente a Tiempo Completo

Un coordinador del curso, integrante del Equipo de Salud propuesto por la Unidad de Capacitación.

1.2. Personal Docente a Tiempo Parcial

Integrantes del Equipo de Salud, representantes de otros sectores y de la comunidad.

2. Recursos Económicos y Fuentes de Financiamiento

Los recursos económicos para el Curso estarán constituídos por los provenientes del Ministerio de Salud, Organismos Internacionales y Comunidad y otros Sectores e Instituciones no Públicos.

LL. Autorización

Para el desarrollo del Curso de Promotores de Salud es necesaria la Autorización de la Región de Salud correspondiente.

M. De la Organización y Funcionamiento del Curso

- La Unidad Ejecutiva estará a cargo de un profesional de salud que haya recibido orientaciones para ello y laborará a tiempo completo.

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- La organización de este tipo de cursos por instituciones que no sean del Ministerio de Salud, adoptarán una estructura similar, especificando claramente la coordinación con la Dirección Regional de Salud, a través del Area Hospitalaria correspondiente.

N. De la Evaluación, Supervisión y Control del Curso

Teniendo como referencia las presentes Normas, las Direcciones Regionales de Salud y la Organización Comunal a través de sus órganos correspondientes, evaluarán, supervisarán y controlarán los cursos de formación de promotores.

O. De la Certificación

A los participantes que aprueben el curso, el organismo responsable otorgará la constancia correspondiente, la misma que será refrendada por la Dirección del Area Hospitalaria respectiva.

P. Ambito de las Normas

Las presentes normas alcanzan a todos los organismos que desarrollan este tipo de actividades educativas en todo el territorio de la República.

III. NORMAS TECNICO PEDAGOGICAS

A. Perfil del Promotor de Salud

1. Participación en la promoción y desarrollo de la comunidad.

- Identificar las organizaciones representativas de la comunidad, incluyendo al Sistema de Servicios de Salud.
- Motivar a la organización para el conocimiento de su problemática sanitaria.
- Participar en las reuniones comunales para proponer y estimular la elaboración de proyectos de desarrollo y específicos para la solución de problemas de Salud.
- Promover la organización del Botiquín Comunal.

2. Participación en el saneamiento básico y prevención y control de enfermedades transmisibles.

- Promover la participación de la comunidad en actividades tendientes a mejorar el saneamiento básico.
  - Aplicación de medidas para proteger las fuentes de abastecimiento de agua.
  - Protección y mantenimiento de letrinas
  - Destino sanitario de excretas y basuras
  - Orientar el curso de las denuncias en los casos de mordeduras de animales sospechosos de tener rabia.

- Notificar oportunamente al servicio de salud los casos sospechosos de enfermedades transmisibles, así como de brotes endémicos.

3. Atención a las Personas

- Orientar a las familias sobre medidas de conservación de la salud y prevención de las enfermedades que con más frecuencia se presentan en su comunidad.
- Identificar a la población infantil susceptible de ser vacunada o revacunada por el personal de salud.
- Orientar a las familias sobre la importancia del control del niño sano.
- Orientar a las familias sobre la importancia de la paternidad responsable.
- Brindar primeros auxilios en casos de urgencias.
- Derivar oportunamente a los establecimientos de salud a:
  - gestantes y puérperas con signos y síntomas de alarma
  - niños con deshidratación y desnutrición y todos los casos que requieran tratamiento por personal profesional de salud.

A. Metodología de la Enseñanza

Teniendo en consideración el grado de instrucción de los participantes, la metodología a utilizarse será de carácter práctico y participatorio, partiendo siempre del conocimiento y experiencia previas de los participantes para reforzar o modificar conceptos y actitudes. Las técnicas a utilizar serán exposición, diálogo - demostración, escenificaciones y dinámica de grupo.

B. Evaluación

Esta función se desarrollará mediante la observación del desenvolvimiento y participación del alumno en situaciones planteadas que correspondan a la vida real de acuerdo a su perfil de actividades, a fin de orientarlo en aquellos aspectos que necesitan ayuda.

Evaluación Diagnóstica.- La evaluación del alumno será a través de la entrevista o una prueba de evaluación diagnóstica.

Evaluación del Desarrollo del Curso.- Es parte integrante del proceso enseñanza-aprendizaje e informe del grado de avance de los alumnos en función a los objetivos deseados.

Evaluación Final.- Es un proceso de descripción y juicio para clasificar a los participantes de acuerdo a los niveles de avance, se expresa en notas y conceptos. Está estrechamente vinculada a la evaluación diagnóstica y del desarrollo del curso.

ESQUEMA DE ESTRUCTURA CURRICULAR PARA LA

CAPACITACION DE PROMOTORES DE SALUD

PERFIL DE ACTIVIDADES	UNIDAD DE APRENDIZAJE	EVALUACION	TIEMPO (EN HORAS)
	ORIENTACION DEL CURSO	DIAGNOSTICA	4
	UNIDAD I		
- Participar en la Promoción y desarrollo comunal	Participación del Promotor de Salud en la promoción y desarrollo de la comunidad	D E L	37
	UNIDAD II	D	26
- Saneamiento Básico, prevención y control de enfermedades transmisibles.	Participación del promotor de Salud en el Saneamiento Básico, prevención y control de enfermedades transmisibles	E S A R R O L L	
- Atención a las Personas	UNIDAD III	O	74
	Participación del Promotor de Salud en la atención a las personas.	D E L C U R S O	
		FINAL	3
		TOTAL HRS.	144

U N I D A D I

PARTICIPACION DEL PROMOTOR DE SALUD EN LA PROMOCION Y DESARROLLO COMUNAL

Objetivos Terminales:

Al finalizar esta unidad, los participantes estarán en capacidad de :

- Interpretar la salud como integrante del desarrollo
- Identificar su ubicación dentro del Sistema de Servicios de Salud y su responsabilidad en la comunidad
- Describir su participación en el logro del conocimiento, identificación y solución de problemas por la comunidad, en forma consciente y organizada.

LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	CONTENIDOS EDUCATIVOS EXPERIENCIAS DE APRENDIZAJE.	TIEMPO EN HORAS
1. Conceptos de Salud	Explicar el concepto de salud en su aspecto integral.	A partir del conocimiento de los participantes fijar el concepto de salud en su aspecto integral y su relación con el desarrollo de la comunidad.	2
2. Sistema de Servicios de Salud	2.1. Identificar y explicar el sistema de servicios de salud, según niveles de atención.	2.1.1. Graficar y explicar el sistema de Salud, los niveles de Atención y Ambito de sus responsabilidades.	1

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LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	CONTENIDOS EDUCATIVOS EXPERIENCIAS DE APRENDIZAJE	TIEMPO EN HORAS
	2.2. Precisar la ubicación de la Comunidad y del sistema.	2.2.2. En grupos de trabajo, definir los roles de la comunidad y de los Promotores de Salud.	2
3. Conocimiento y Promoción de la Comunidad	3.1. Identificar la organización de su comunidad los órganos representativos, los líderes formales e informales.	3.1.1. A partir de las experiencias de los participantes, definir la comunidad, sus órganos representativos y tipos de líderes.	2
	3.2. Definir técnicas participativas que permitan el conocimiento de la problemática de la comunidad y las formas de plantear alternativas de solución.	3.2.2. Escenificar una asamblea comunal y precisar como se plantean y resuelven los problemas de salud. Establecer con el grupo los tipos de problemas y su relación con la salud de la población. Precisar las etapas para un conocimiento participativo: - Motivación - Recojo de información - Procesamiento de datos - Identificación de necesidades - Análisis de resultados - Priorización de problemas - Proyectos específicos de acción. - Evaluación.	8

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LINEAS DE ACCION EDUCATIVA	OBJETIVO EDUCATIVO	CONTENIDOS EDUCATIVOS EXPERIENCIAS DE APRENDIZAJE	TIEMPO EN HORAS
	3.3. Definir su participación en el planteamiento y ejecución de proyectos específicos de acción.	3.3.1. En equipos de trabajo y con asesoramiento del instructor, elaborar un proyecto para la organización del botiquín comunal y/o de huertos y granjas (a criterio del grupo).	8
	3.4. Demostrar las técnicas más usuales para motivar y orientar las reuniones grupales.	3.4.1. Escenificar con los participantes las técnicas mas usuales para motivar y orientar las reuniones comunales, (panel-discusión de grupo, etc.)	4
		Total Horas Teórico-Prácticas	27

U N I D A D II

PARTICIPACION DEL PROMOTOR DE SALUD EN EL SANEAMIENTO BASICO, PREVENCION Y CONTROL DE ENFERMEDADES TRANSMISIBLES MAS COMUNES

OBJETIVOS TERMINALES:

Al finalizar esta Unidad, los participantes estarán en capacidad de:

- Identificar los principales problemas relacionados con el Saneamiento Básico de la comunidad
- Identificar por sus manifestaciones sintomáticas, las enfermedades transmisibles mas frecuentes de la Región y demostrar las medidas de control adecuadas.

LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	EXPERIENCIA DE APRENDIZAJE	TIEMPO HORAS
1. Saneamiento Básico	1.1. Identificar las necesidades de saneamiento básico a fin de mejorarlo.	1.1.1. En pequenos grupos discutir lo observado en relación a los problemas de saneamiento básico existentes en la comunidad.	2
		- Realizar las siguientes actividades con asesoramiento del técnico. . Protección de pozos y manantiales. . Instalación y mantenimiento de letrinas . Disposición final de basuras . Control de vectores y roedores	8
.. Control de zoonosis, parasitosis, y malas-	2.1. Descubrir las conductas a seguir en caso de mordeduras de animales sospechosos de rabia.	2.1.1. Con la ayuda de material informativo y en pequeños grupos, los participantes deben describir las características y formas de	4

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LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	EXPERIENCIAS DE APRENDIZAJE	TIEMPO HORAS
		transmisión y prevención de la enfermedad. Demostrar las acciones que se deben realizar en caso de mordeduras.	
	2.2. Reconocer los principales parásitos que afectan con mayor frecuencia a las personas y su profilaxis.	2.2.1. Observar parásitos externos e internos (intestinales) con ayudas visuales y/o laboratorio. (Opcional) Mecanismo de prevención y tratamiento.	8
	2.3. Identificar los casos febriles, toma de muestras hemáticas (gota gruesa) y administración de drogas antimaláricas.	2.3.1. Conocimiento global de la malaria. - practicar la toma de muestras (gota gruesa) - Interpretar los esquemas de tratamiento antimalárico.	4
		TOTAL HORAS TEORICO - PRACTICAS	26

U N I D A D III

PARTICIPACION DEL PROMOTOR DE SALUD EN LA ATENCION A LAS PERSONAS

OBJETIVOS TERMINALES:

Al finalizar esta Unidad, los participantes estarán en capacidad de :

- Reconocer los grupos de alimentos y explicar como se puede utilizar los productos de la Región para una adecuada alimentación.

- Identificar las enfermedades que pueden ser prevenibles por vacunas y demostrar la manera de orientar a las familias al respecto, (tipo de vacunas, vías de administración y calendario)

- Identificar los signos y síntomas de las enfermedades más comunes de la infancia y su forma de prevenirlas.

- Señalar los signos y síntomas de la tuberculosis pulmonar, los mecanismos de transmisión, los medios para prevenirla. Obtener información sobre los esquemas de tratamiento.

- Explicar la evolución normal del embarazo, parto, puerperio, así como los signos y síntomas de alarma - en cada una de estas etapas y la participación que le corresponde al promotor en cada caso.

- Explicar las características del niño normal en sus diferentes etapas de desarrollo.

- Describir por sus características sintomáticas las enfermedades más comunes de la Región, su prevención y el tratamiento respectivo.

- Brindar primeros auxilios en casos de urgencias

- Explicar las acciones que le competen al Promotor en relación a asuntos Médico-Legales y de Defensa Civil.

Best Available Document

LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	CONTENIDOS EDUCATIVOS EXPERIENCIAS DE APRENDIZAJE	TIEMPO
1. ALIMENTACION - NUTRICION	1.1. Identificar los recursos alimentarios que tiene la Región y conocer el valor nutritivo de los mismos.	1.1.1. Valor nutritivo de los alimentos. . Dietas básicas . Alimentación de tipo especial y demostraciones	2
	1.2. Promover la alimentación de la población en términos cuali-cuantitativos.	1.2.1. Alimentación del niño según edad . Lactancia materna . Formas de lactancia . Ablactancia . Demostraciones	2
		1.2.2. Manipulación y conservación de alimentos	2
		1.2.3. Demostración de formas y procedimientos para impartir conocimientos sobre alimentación a la comunidad	2
2. VACUNACIONES	2.1. Interpretar las principales características de las enfermedades previsibles por vacunas.	2.1.1. Organizar experiencias-diálogo sobre el proceso salud-enfermedad, con ayudas educativas y con ejemplos reales, observar y explicar la característica de las principales enfermedades de la Región, prevenibles por vacunas.	2
	2.2. Identificar los tipos de vacunas que se aplican y sus principales características.	2.2.1. Observar las características de micro-organismos en el Servicio de Laboratorio (opcional)	2

LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	CONTENIDOS EDUCATIVOS EXPERIENCIAS DE APRENDIZAJE	TIEMPO
	2.3. Manejo y conservación de la vacuna	2.3.1. Exposición-diálogo sobre como se adquiere, transita y previene el sarampión-poliomielitis-difteria-tos convulsiva y tétanos.	2
		2.3.2. Visitar un Centro de Salud y observar el almacenamiento y manejo de vacunas (de acuerdo a una guía de observación)	4
	2.4. Explicar los medios que debe utilizar en la educación de la comunidad sobre la vacunación.	2.4.1. Preparar con grupos de participantes, material educativo según las enfermedades anotadas anteriormente. Elaborar el calendario de Vacunaciones	4
3. PREVENCION Y TRATAMIENTO DE ENFERMEDADES MAS COMUNES DE LA INFANCIA	3.1. Reconocer las características del niño con diarreas y deshidratación, según gravedad	3.1.1. Demostrar el aspecto normal - la apreciación del niño. - Identificar signos y síntomas de deshidratación	3
		3.1.2. Apreciar las características de una deshidratación severa	
		3.1.3. Demostrar la preparación de soluciones Rehidratantes: Suero casero, sobres de rehidratación oral.	2
		3.1.4. Demostrar la administración del suero y alimentación del niño, así como los procedimientos para la transferencia de los casos	1

LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	CONTENIDOS EDUCATIVOS EXPERIENCIAS DE APRENDIZAJE	TIEMPO
	3.2. Instruir sobre la aplicación de medidas preventivas.	3.2.1. Organizar y demostrar ante un grupo de madres de familia los cuidados preventivos en casos de diarreas (informar conceptos sobre alimentación del niño en casos especiales)	2
	3.3. Reconocer las características del niño con infección respiratoria aguda, leve y grave.	3.3.1. Demostrar el reconocimiento del niño con infecciones respiratorias agudas, leves y graves.	2
	3.4. Conocer el manejo de analgésicos y antitusígenos.	3.4.1. Demostrar la administración de analgésicos y antitusígenos	2
	3.5. Instrucción sobre la aplicación de medidas preventivas	3.5.1. Demostrar la toma de temperatura y cuidados del niño en casos de vacunaciones.	2
		3.5.2. Demostraciones de cuidados para evitar resfriados y otras enfermedades respiratorias agudas.	
4. CONTROL DE T.B.C. PULMONAR	4.1. Mencionar los síntomas y signos de tuberculosis pulmonar, cómo se transmite y cómo se trata la enfermedad.	4.1.1. Tuberculosis pulmonar formas de transmisión, prevención y tratamiento	2
		4.1.2. Observar en laboratorio la forma de muestra de esputo y el extendido en lámina para examen baciloscópico	
		4.1.3. Practicar el llenado de los formularios para la transferencia de los tosedores crónicos.	2

LINEAS DE ACCION EDUCATIVA	OBJETIVOS EDUCATIVOS	CONTENIDOS EDUCATIVOS EXPERIENCIA DE APRENDIZAJE	TIEMPO
		4.1.4. Conocer los esquemas del tratamiento de la P.B.C.	1
5. EMBARAZO, PARTO, PUERPERIO, LACTANCIA, PLANIFICACION FAMILIAR Y ATENCION DEL RECIEN NACIDO.	5.1. Demostrar como debe orientar a la gestante sobre la importancia del control del embarazo.	5.1.1. Comentar en base a las experiencias de grupo sobre: - Signos y síntomas del embarazo normal - Molestias más comunes del embarazo - Interpretar el significado del bajo, mediano y alto riesgo.	2
		5.1.2. Cuidados durante el embarazo - Alimentación - Higiene, descanso, ejercicios - Seguimiento de la gestante para su control	2
	5.2. Mencionar cuales son las causas más frecuentes de complicaciones y muertes en el embarazo y explicar la conducta adecuada a seguir con tales casos	5.2.1. Principales causas de morbi-mortalidad materna, fiebre, edema y hemorragia - Conducta a seguir frente a estos casos. - Exposición, diálogo, estimonio, proyección de vistas fijas	
	5.3. Demostrar utilizando modelos, como recibir al recién nacido en caso de urgencia.	5.3.1. Formas de recibir al recién nacido en casos de urgencia observando las reglas de higiene, cuidado con el cordón umbilical, aspiración de secreciones, cuidado de ojos. - Control del niño sano	1

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LINEAS DE ACCION EDUCATIVA	OBJETIVO EDUCATIVO	CONTENIDO EDUCATIVO EXPERIENCIA DE APRENDIZAJE	TIEMPO
6. Primeros auxilios	6.1. Identificar y demostrar el tipo de atención que se debe brindar en cada uno de los casos de primeros auxilios.	6.1.1. Demostrar la atención de primeros auxilios en casos de: Desmayos Representar una dramatización en la que se ponga de manifiesto un caso de desmayo, brindar los cuidados necesarios. Hemorragias Discutir las experiencias personales y lo observado sobre el tratamiento de hemorragia sus resultados (medicina tradicional). Establecer la relación entre la hemorragia y la herida según su tamaño Heridas, luxaciones y fracturas Discutir las experiencias personales y lo observado sobre el tratamiento de heridas, luxaciones y fracturas. Apoyar con ayudas audiovisuales o gráficos. Practicar la inmovilización con tablillas de fracturas y luxaciones de miembros superiores e inferiores y ejercitarse en el transporte de fracturados de columna y otros Preparar y equipar un botiquín de primeros auxilios	1 4

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LINEAS DE ACCION EDUCATIVA	OBJETIVO EDUCATIVO	CONTENIDO EDUCATIVO EXPERIENCIA DE APRENDIZAJE	TIEMPO
		Quemaduras Discutir las experiencias personales y lo observado sobre el tratamiento de quemaduras.	1
		Envenenamientos Discutir las experiencias y lo observado sobre las diferentes formas de envenenamiento y preparar un listado con los procedimientos para atender los diferentes casos de envenenamiento. Preparar la fórmula de antídoto universal.	1
		Picadura de insectos y mordeduras de animales ponzoñosos Preparar un listado de acciones a realizar para la atención en las picaduras	
	Reconocer y extraer cuerpos extraños del ojo, oído, nariz y otras partes del cuerpo	Cuerpos Extraños Recoger testimonios de personas que han tenido cuerpos extraños en su organismo, la forma en que han sido extraídos y sus resultados (medicina tradicional)	2
		Asfixia y ahogamiento Practicar el procedimiento a utilizar en casos de ahogamiento.	2

LINEAS DE ACCION EDUCATIVA	OBJETIVO EDUCATIVO	CONTENIDO EDUCATIVO EXPERIENCIA DE APRENDIZAJE	TIEMPO
7. ACTIVIDADES MEDICO-LEGAL Y DEFENSA CIVIL	7.1. Conocer la conducta a seguir en caso de situaciones de carácter general médico legal.	7.1.1. Recibir del especialista instrucciones sobre conducta a seguir ante situaciones médico legales.	4
	7.2. Interpretar la organización y funcionamiento del sistema de Defensa Civil a nivel local.	7.2.1. Practicar acciones de Defensa Civil que indiquen las autoridades locales del sistema de Defensa Civil	4
		TOTAL :	74 hr. T.P.

PDAAR-812

EVALUATION
HEALTH PROMOTER PROGRAM
MINISTRY OF HEALTH, PERU
JANUARY-JUNE 1984

VOLUME II

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Crosstabulations, Promoter Survey

Code Book, Community Survey

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Case Studies

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Var.	Preg.		Columna
1	A1	**Región de Salud** 0 no información 1 Piura-Tumbes 2 San Martin 3 Huánuco-Pasco-Ucayali 4 Callao 5 Ica 6 Arequipa 7 Puno 8 Ancash	6
2	A1	Area Hospitalaria 0 no información 1 Piura 2 Sullana 3 Moyabamba 4 Tarapoto-Lamas 5 Pucallpa 6 Tingo Maria 7 Chacay 8 Collique 10 Ica-Palpa-Nazca 11 Pisco-Castrobirreyna 12 Arequipa 13 Castilla 14 Melgar-Carabaya 15 Puno-Chucuito 16 Huaraz 17 Pomabamba	7 8
3	A1	Comunidad, caserío, vecindad Región Piura - AHA Piura 1 Rio Viejo Sur 2 Sta. Elena (Casa Grande) 3 Chaquira " 4 Vichayal " 5 Alto de los Carillos " 6 Alto de la Cruz " 7 Loma Negra Sur " 8 Paredones (Simbila) 10 Mocora " 11 Monte Castillo " 12 Simbila " 13 Molino Azul " 14 La Piedra " 15 La Arena (La Arena) 16 Monte Redondo " 17 El Penal " 18 Nuevo Tamarindo " 19 Pampa de los Silvas " Asentamiento 13 de Abril 20 Alto de los Moes " 21 Monte Grande " 22 Alto de los Castillos " 23 Canisal Chico " 24 Chatito " Región Piura - AHA Sullana 36 La Bocena (Miramar) 37 Miramar "	9 10 11

Tarjeta 1

Var.	Preg.		Columna
3	A1	Comunidad, caserío, vecindad	9 10 11

Región Piura - AHA Sullana (con't)

38 Cas. San Luis (Miramar)
39 Tamarindo (San Pedro)
40 Tamarindo (Monte Lima)
41 Ignacio Escudero "
42 Tamarindo (La Libertad)
43 Mallaritos "
44 Mallares (Mallaritos)
45 Mallaritos (La Quinta)

Región San Martín - AHA Moyobamba-Rioja

61 Rafael Belaundé
62 José Cáluce
63 Nvo. Tabalosos
64 Nva. Esperanza
65 Pioneros
66 Porvenir
67 Mirador
68 Yarinal
69 Tumbaro
70 Ochame
71 Sinamal
72 Shimpiyacu
73 Perla Mayo
74 Alto Naranjillo

Región San Martín - AHA Tarapoto-Lamas

90 Shapumba
91 Auca Loma
92 Garrapata
93 Pucayacu
94 Panjui
95 Huimbamuyuna
96 3 de Octubre
97 San Fernando
98 Carañayaco
99 Pampa Hermosa
100 Vista Alegre
101 Pampa Jacu
102 San Martín de Cumbaza
103 San Juan de Tallicuilhiu
104 Santa Cruz
105 Nuevo Mundo
106 Huapo
107 Huayco
108 Alto Shamboyacu
109 Bellavista
110 Poloponta

Región Huánuco - AHA Pucallpa

126 Nuevo San Lorenzo (C. nativa)
127 Belgica
128 Nueva Unión
129 Campo Grande
130 9 de Octubre
131 Patria Nueva
132 Panailio
133 Calleria
134 Flor de Ucayali
135 Campo Verde
136 Nuevo Saposa (C. nativa)
137 Los Milagros

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Comunidad, caserío, vecindad

Región Huánuco - AHA Tingo Maria

149 San Andrés
150 San Juan Tulumayo
151 La Colorada
152 Topa
153 Santa Rosa Quezada
154 Cayumba
155 Chagua Nueva
156 Bella Vista
157 Fazo Grande
158 Corvinilla
159 Puerto Prado
160 Pueblo Joven 5 de Nov.
161 La Florida
162 Pendencia
163 La Roca
164 Camote
165 Bella Alta
166 Manchurio
167 Inuti

Región Callao - AHA Chacay

179 Ravira
180 Vicha y Cocha
181 Chauca
182 Pirca
183 Chisque
184 Cormo
185 Piscocoto
186 Coto
187 Lampian
188 Canchapi'ca
189 Puna
190 Carac
191 Gramadeles (Gramorales)
192 San Graciano
193 San Miguel
194 Pallac
195 Pueblo Libre
196 Boza
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Región Callao - AHA Collique

212 San Miguel
213 Obrajillo
214 Panamarca
215 Carmen Alto
216 La Juventud
217 Manco Inca

Tarjeta 1
Columna

Var.	Preg.	
3	A1	Comunidad, caserío, vecindad

Región Callao - AHA Collique

218 La Balanza
219 San Gabriel
220 San Ramón
221 Kennedy
222 Primavera
223 San Martin
224 Santa Rosa de Quiveq
225 Yaso
226 Collo
227 Tocahuasi
228 Apio Viscas
229 San Buena Bentura
230 Kenray

Región Ica - AHA Ica-Palpa-Nazca

245 Caserio el Olivio
246 Caserio Camino de Reyes
247 Caserio Congar
248 Caserio Cerro Prieto
249 P.J. La Angustura
250 Paviña Grande - Pueblo Nuevo
251 Callejon de los Espinos - Pueblo Nuevo
252 Barrio Los Chalpes Callejon- Pueblo Nuevo
253 Pampa de Yatasi - Pueblo Nuevo
254 Pongo las Segarra - Pueblo Nuevo
255 Chuapaco - Pueblo Nuevo
256 Sunampe
257 Huamanquilla
258 Tallamana
259 El Arenal
260 Los Piscontes
261 Los Aquijes
262 Rosario de Yanca
263 Distrito Cuadalupe

Tarjeta 1
Columna
9 10 11

Var.	Preg.
3	A1

Comunidad, caserío, vecindad

Región Ica - AHA Pisco-Castrovirreyna

277 Pisco
278 San Clemente
279 Villa Tupac Amaru
280 San Andres

Región Arequipa - AHA Arequipa

296 Tapay y Cosnirhua (Provincia de Caylloma)
297 Huambo "
298 Pinchollo "
299 Cabanaconde "
300 Yanque "
301 Achoma "
302 Coporaque "
303 Maca "
304 Tuti "
305 Callalli "
306 Sibayo "
307 Miguel Grau (Provincia de Arequipa)
308 Mollebaya "
309 Characato "

Región Arequipa - AHA Castilla

325 Ccochapampa (Provincia de Cotahuasi)
326 Pampamarca "
327 Harhua "
328 Mungui "
329 Quillunza "
330 Chupacra (Localidad de Viraco)
331 Tipan "
332 Paracolca "
333 Tagre "
334 Cahuana (Provicia de Cotahuasi)
335 Piramarca "
336 Luicho "
337 Antabamba "

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Comunidad, caserío, vecindad

Región Arequipa - AHA Castilla (cont')

338 Visbe (Provincia de Cotahuasi)
339 Achambi "
340 Locrahuanca "
341 Hyanacotas "

Región Puno - AHA Melgar-Caraballa

357 Paylla (Ayaviri #3)
358 Selque-Macari
359 Ccollama-Macari
360 Umachiri
361 Pare Corani
362 Bajo Ccollana-Macari
363 Jatón-Sayma
364 Isla Kaluzo (Melgar Carabaya #38)
365 Vizcachiri
366 Huichullo
367 Cuchoprijo (Nuñoa)
368 Sincata
369 Anchallani
370 Balsapata
371 Isla Malcijo

Región Puno - AHA Puno-Chucuito

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388 Huilamocco
389 Cari-Cari
390 Chinchera
391 Potojeni Grande
392 Tejquina
393 Pahamaya
394 Unicachi
395 Capaxi
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397 Poxin Carata
398 Ticana Cusullaca
399 Chaullacamani (P.S. Chipana)
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401 Tara Cancamaya
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402 Villa Moquere
404 Tapapisi Challampampa
405 Copani
406 Calacoto
407 Parcialidad Molino
408 Ancrariuyo-Riva
409 Anco Puto-Cuarto Corgicha
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Tarjeta 1

Var.	Preg.	Columna
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Puno - AHA Puno-Chucuito (cont')

411 Bajo Airiguas
412 Parco
413 Parco-Sector Arboleda
414 Allavaya
415 Pajana Mohocachi
416 Timicachi-Sihualaya
417 Huayllani
418 Silla Muri

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419 Jirac, Sirac, Dirac
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438 Ancoraca
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444 Santo Toribio
445 Uchuhuayta
446 Llocllа
447 Cayapampa
448 Shirapata
449 Millurish
450 Pariapata
451 Chavin
452 Marcac
453 Picup
454 Cajapampa

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4	A2	Zona Ecológica 0 no información 1 costa 2 selva baja 3 selva alta 4 sierra sur 5 sierra norte-centro	12
5	A3	Población 0 no información 1 menos de 500 2 500-1000 3 1000-1500 4 1500-2000 5 más de 2000	13
6	A4	Material del Techo 0 no información 1 teja 2 calamina 3 paja 4 eternit 5 otro	14
7	A5	Material del Piso 0 no información 1 tierra 2 madera 3 cemento 4 tierra y cemento 5 otro	15
8	A6	Habitaciones 0 no información 1-8 9 no aplicable	16
9	B1	Sexo del Promotor 0 no información 1 mujer 2 hombre	17
10	B2	Edad 0 no información 1-99 años	18 19
11	B3	Estado Civil 0 no información 1 casado 2 viudo 3 soltero 4 conviviente 5 divorciado	20
12	B4	Número de Hijos 0 no información 1-99 99 no aplicable 88 no tiene	21 22
13	B5	Escolaridad 0 no información 1 ninguno 2 2 de primaria 3 5 de secundaria 4 1-2 de secundaria 5 secundaria completa 6 más	23

Tarjeta
1
Columna

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14	B6	Años en la Comunidad 0 no información 1 - 88	24 25 26 27 años meses
15	B7	Idiomas más que Español Quechua 0 no información 1 si 2 no	28
16		Aymara 0 no información 1 si 2 no	29
17		Aguaruna 0 no información 1 si 2 no	30
18		Shipivo 0 no información 1 si 2 no	31
19		Otro - Chino 0 no información 1 si 2 no	32
20		Otro 0 no información 1 si 2 no	33
21	B8	Idioma Principal 0 no información 1 castellano 2 quechua 3 aymara 4 shipivo 5 aguaruna 6 otro 7 otro 8 otro	34
22	B9	Otro Idioma 0 no información 1 ninguno 2 quechua 3 aymara 4 aguaruna 5 shipivo 6 7 8	35
23	B10	Trabajo Principal 0 no información 1 agricultura-consumo propio 2 agricultura comercial 3 independiente 4 ambulante 5 ama de casa 6 trabajo no asalariado 7 otros-profesores 8 otros empleados, obreros, etc.	36

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24	B11	Salud-Familia 0 no información 1 si 2 no	37
25	B12	Tiempo-Promotor 0 no información años meses 00-99 00-12	38 39 40 41
26	B13	Salud antes Capacitación 0 no información 1 si 2 no	42
27	B14	Trabajo Anterior 0 no info 1 curandero 2 yerbatero 3 partero 4 huesero 5 comité de salud 6 ejercito 7 aux. de enfermería 8 otros 9 no aplicable	43
28	B15	Continuación 0 no info 1 si 2 no	44
29	Cuadro 1	Capacitación Primera Capacitación-Fecha 0 no información año mes	45 46 47 48
30		Primera Capacitación-Duración 0 no info. días 0-888 999 no sé + no recuerda	49 50 51
31		Primera Capacitación-Entidad 0 no info. 1 Min, de Salud 2 Hospital Local 3 Ejercito 4 UNICEF 5 AID 6 Org. religiosas 7 Org. Extranjeras 8 Prelatura 9 no aplicable 10 Centro Salud 11 Sanitario 12 I. Neoplasio 13 Academias - Institutos - Ministerios 14 Correspondencia 15 Doctor 16 Partidos Políticos	52 53
32		Segunda Capacitación-Fecha 0 no información año mes 9 no aplicable	54 55 56 57

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36		Primer Refrescamiento-Duración 0 no info. 0- 88 días	67 68
37		Capacitación Primer Refrescamiento-Entidad 0 no info 1 Min. Salud 2 Hospital Local 3 Ejercito 4 UNICEF 5 AID 6 Org.Religiosas 7 Org. Extranjeras 8 Prelatura 9 No Aplicable 10 Centro de Salud 11 Sanitario 12 CIPCA 13 Hospital Amazónico 14 Institutos 15 CID - Comité Intracomunal de Desarrollo	69 70
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Tarjeta 1
Columna

Var.	Preg.		
41	C1	Proceso de Selección 0 no info 1 concurso-comité de salud 2 asamblea más repres. salud 3 sanitario 4 voluntaria 5 asamblea comunal 6 médicos de paso 7 MS 8 Comité de Salud 9 no aplicable 10 profesores, autoridades, ejército, "coerción" 11 iglesia	79 80
			Tarjeta 2
42	C2	Razón-Selección 0 no información 1 interés en ayudar la comunidad 2 ganó concurso 3 labor desempeñada 4 por ser lider 5 conocimientos 6 trabajo como auxiliar 7 disponibilidad de tiempo 8 ser responsable y bueno 9 no aplicable 10 coerción 11 otros	6 7
43	C3	Capacitación-Adecuacia 0 no info 1 si 2 no	8
44	C4	Resolver Problemas-Salud 0 no info. 1 apoyo materiales - prim. aux. 2 medicamentos 3 apoyo profesional 4 coordinación con grupos en la comunidad 5 visitas domiciliarias 6 construcción de posta 7 mandar médico permanente 8 ambulancia 9 no aplicable 10 capacitación 11 agua y desague 12 más materiales pat. responsable 13 charlas educativas 14 más personal 15 prevención 16 no sabe 17 otro - pagar promotor	9 10
45	C5	Cursos-Refrescamiento 0 no info. 1 actualización o repeso después capacit. 2 nuevos conocimientos y ampliación 3 no olvidar lo aprendido 4 lo mejor quepuede dar la región 5 supervisión 6 otro - esterilizar meds, etc. 7 8 no sabe bien 9 no aplicable	11
46	C6	Otros cursos 0 no info. 1 si 2 no	12

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Var.	Preg.		Tarjeta 2 Columna
47	C7	No Asistencia-Refrescamiento 0 no info. 1 no han llamado 2 no han dado 3 han prometido y estamos esperando 4 recibió materiales al capacitarse 5 falta de interés 6 imposibilidad-por trabajo-dinero mobilizarse 7 falta tiempo 8 otros- salud, etc. 9 no aplicable	13
48 .	D1	Charlas 0 no info. 1 si 2 no	14
49	D2	Como Reunir Gente 0 no info. 1 citaciones 2 coordinación con clubs 3 coordinación con directiva 4 pegado de afiches 5 personalmente 6 radiodifusoras 7 asambleas ordinarias 8 otro 9 no aplicable	15
50	D3	Ultima Charla 0 no info. años meses dias 9 no aplicable	16 17 18 19 20 años meses días
51	D4	Charlas-Temas 0 no información 1 no. de temas 9 no ap. Temas al final Var. 468 a 474	21
52	D5	Letrinas 0 no info 888 no sabe 1- número 999 ninguna, no hay	22 23 24
53	D6	Instalación con Ayuda 0 no info 1 ninguna 2- 888	25 26 27
54	D7	Razón no-Instalación 0 no info 1 no oportunidad - falta plata, materiales 2 estaban instaladas 3 hay desague 4 la gente no quiere + apoyo 5 falta de cultura y apoyo 6 pueden enfermarse 7 no es adecuado el terreno 8 problemas climatológicos y otros 9 no aplicable	28

2,85

Var.	Preg.		Tarjeta 2 Columna
55	D8	**Agua-Casa** 0 no info 1 pozo 2 río 3 pilas, 4 manatial 5 acequias 6 motor-potable 7 otro 8	29
56	D9	**Ayuda Instalación-Agua** 0 no info 1 si 2 no	30
57	D10	Forma Ayuda-Agua 0 no info 1 enseñando importancia 2 mano de obra 3 formando comisiones 4 haciendo gestiones 5 trabajando con comités 6 consiguiendo o contribuyendo dinero 7 otro 8 no he tenido oportunidad 9 no aplicable	31
	D11	Vacunas Niño	32
58		Antitetánica 0 no info 8 no sabe 1 si 2 no mencionado	
59		Antitetánica- edad 0 no info edad del niño 9 no aplicable	33 34 35 36 37 38 años meses días
60		Antitetánica-número de dosis 0 no info __ número de dosis 9 no aplicable	39
61		Sarampión 0 no info 8 no sabe 1 si 2 no mencionado	40
62		Sarampión-edad 0 no info __ edad 9 no aplicable	41 42 43 44 45 46 años meses días
63		Sarampión-número dosis 0 no info __ número de dosis 9 no aplicable	47
64	D11	Triple - DPT - DT - T 0 no info 1 si 2 no mencionado 8 no sabe	48

Tarjeta 2

Var.	Preg.		Columna
65	D11	Vacunas Niño Triple-edad 0 no info __ edad del niño 9 no aplicable	49 50 51 52 53 54 años meses días
66		Triple-número de dosis 0 no info __ número de dosis 9 no aplicable	55
67		BCG 0 no info 8 no sabe 1 si 2 no mencionado	56
68		BCG-edad 0 no info __ edad 9 no aplicable	57 58 59 61 61 62
69		BCG-número dosis 0 no info __ número 9 no aplicable	63
70		Fiebre amarilla 0 no info 8 no sabe 1 si 2 no mencionado	64
71		Fiebre amarilla - edad 0 no info __ edad 9 no aplicable	65 66 67 68 69 70
72		Fiebre amarilla-número de dosis 0 no info __ número 9 no aplicable	71
73		Polio 0 no info 8 no sabe 1 si 2 no mencionado	72
74		Polio-edad 0 no info __ edad 9 no aplicable	73 74 75 76 77 78
75		Polio-número dosis 0 no info __ dosis 9 no aplicable	79
76		Viruela 0 no info 8 no sabe 1 si 2 no mencionado	80

Tarjeta 3
Columna

Var.	Preg.		
77	D11	Vacunas Niño Viruela-edad 0 no info __ edad 9 no aplicable	6 7 8 9 10 11 año mes días
78		Viruela-número de dosis 0 no info __ número de dosis 9 no aplicable	12
79	D12	Vacuna-Madres Cestantes 0 no info 1 no sabe 2 antitétano 3 sarampión 4 triple 5 BCG 6 polio 7 fiebre amarilla 8 viruela 9 no aplicable 10 otro 11	13 14
	D13	Actividades	15
80		1. Huertos Familiares 0 no info 1 si 2 no	
81		1. Huertos Familiares-guías 0 no info 1 si 2 no	16
82		1. Huertos Familiares-importancia 0 no info 1 la primera 2 muy importante 3 importante 4 no importante	17
83		1. Huertos Familiares-capacitación 0 no info 1 si 2 no	18
84		2. Reuniones Comunales 0 no info 1 si 2 no	19
85		2. Reuniones Comunales-guías 0 no info 1 si 2 no	20
86		2. Reuniones Comunales-importancia 0 no info 1 la primera 2 muy importante 3 poco imp. 4 no imp.	21

Var.	Preg.	Actividades	Tarjeta 3 Columna
87	D13	2. Reuniones Comunales-capacitación 0 no info 1 si 2 no	22
88		3. Excretas y Basuras 0 no info 1 si 2 no	23
89		3. Excretas y Basuras - guías 0 no info 1 si 2 no	24
90		3. Excretas y Basuras-importancia 0 no info 1 la prim. 2 muy imp 3 imp 4 no imp	25
91		3. Excretas y Basuras- Capacitación 0 no info 1 si 2 no	26
92		4. Primeros Auxilios 0 no info 1 si 2 no	27
93		4. Primeros Auxilios-Guías 0 no info 1 si 2 no	28
94		4. Primeros Auxilios-Importancia 0 no info 1 la prim. 2 muy imp. 3 imp. 4 no imp.	29
95		4. Primeros Auxilios- Capacitación 0 no info 1 si 2 no	30
96		5. Control-Embarazadas 0 no info 1 si 2 no	31
97		5. Control-Embarazadas-Guías 0 no info 1 si 2 no	32

Var.	Preg.		Tarjeta 3 Columna
98	D13	Actividades 5. Control Embarazadas-Importancia 0 no info 1 la más 2 muy 3 imp. 4 no imp.	33
99		5. Control Embarazadas-Capacitación 0 no info 1 si 2 no	34
100		6. Niños-registro civil 0 no info 1 si 2 no	35
101		6. Niños-registro civil-Guías 0 no info 1 si 2 no	36
102		6. Niños-registro civil-Importancia 0 no info 1 la más 2 muy 3 imp. 4 no imp.	37
103		6. Niños-registro civil-Capacitación o no info 1 si 2 no	38
104		7. Inyectables 0 no info 1 si 2 no	39
105		7. Inyectables-guías 0 no info 1 si 2 no	40
106		7. Inyectables-importancia 0 no info 1 la más 2 muy 3 imp. 4 no imp.	41
107		7. Inyectables-capacitación 0 no info 1 si 2 no	42
108		8. Niños-diarrea 0 no info 1 si 2 no	43
109		8. Niños diarrea- Guías 0 no info 1 si 2 no	44

Var.	Preg.	Actividades	Tarjeta 3 Columna
110	D13	8. Niños Diarrea-importancia 0 no info 1 la más 2 muy 3 imp. 4 no imp	45
111		8. Niños Diarrea-capacitación 0 no info 1 si 2 no	46
112		9. Charlas Educativas 0 no info 1 si 2 no	47
113		9. Charlas Educativas-guías 0 no info 1 si 2 no	48
114		9. Charlas Educativas-importancia 0 no info 1 la más 2 muy 3 imp 4 no imp	49
115		9. Charlas Educativas-capacitación 0 no info 1 si 2 no	50
116		10. Gestantes-Nutrición 0 no info 1 si 2 no	51
117		10. Gestantes-Nutrición-Guías 0 no info 1 si 2 no	52
118		10. Gestantes-Nutrición-Importancia 0 no info 1 la más 2 muy 3 imp 4 no imp	53
119		10. Gestantes-Nutrición-Capacitación 0 no info 1 si 2 no	54
120		11. Refiere TBC 0 no info 1 si 2 no	55
121		11. Refiere TBC - Guías 0 no info 1 si 2 no	56

Var.	Preg.	Actividades	Tarjeta 3 Columna
122	D13	11. Refiere TBC-importancia 0 no info 1 la más 2 muy 3 imp. 4 no imp.	57
123		11. Refiere TBC-capacitación 0 no info 1 si 2 no	58
124		12. Colaboración Vacunaciones 0 no info 1 si 2 no	59
125		12. Colaboración Vacunaciones-Guías 0 no info 1 si 2 no	60
126		12. Colaboración Vacunaciones-Importancia 0 no info 1 la más 2 muy 3 imp 4 no imp	61
127		12. Colaboración Vacunaciones-Capacitación 0 no info 1 si 2 no	62
128		13. Gota Gruesa 0 no info 1 si 2 no	63
129		13. Gota Gruesa-Guías 0 no info 1 ai 2 no	64
130		13. Gota Gruesa-Importancia 0 no info 1 la más 2 muy 3 imp. 4 no imp	65
131		13. Gota Gruesa-Capacitación 0 no info 1 si 2 no	66
132		14. Rabia 0 no info 1 si 2 no	67
133		14. Rabia-Guías 0 no info 1 si 2 no	68

Var.	Preg.	Actividades	Tarjeta 3 Columna
134	D13	14. Rabia-Importancia 0 no info 1 la más 2 muy 3 imp 4 no imp	69
135		14. Rabia-Capacitación 0 no info 1 si 2 no	70
136		15. Lactancia-Comidas 0 no info 1 si 2 no	71
137		15. Lactancia-Comidas-Guías 0 no info 1 si 2 no	72
138		15. Lactancia-Comidas-Importancia 0 no info 1 la más 2 muy 3 imp 4 no imp	73
139		15. Lactancia-Comidas-Capacitación 0 no info 1 si 2 no	74
140		16. Planificación Familiar 0 no info 1 si 2 no	75
141		16. Planificación Familiar- Guías 0 no info 1 si 2 no	76
142		16. Planificación Familiar-Importancia 0 no info 1 la más 2 muy 3 imp 4 no imp	77
143		16. Planificación Familiar-Capacitación 0 no info 1 si 2 no	78

Tarjeta 3 Columna

Var.	Preg.		
144	D14	Actividad más Importante 0 no info 1 huertos familiares 2 reuniones comunales 3 excretas y basuras 4 primeros auxilios 5 control embarazadas 6 niños-registro civil 7 inyectables 8 niños-diarrea 9 no aplicable 10 charlas educativas 11 gestantes-nutrición 12 referir TBC 13 vacunaciones 14 gota gruesa 15 rabia 16 lactancia-prim. comidas 17 planificación familiar 18 todas 19 salud materno-infantil 20 nutrición o manejo de alimentos 21 otros	79 80
			Tarjeta 4
145	D15	Ampliación-Capacitación 0 no info 1 huertos familiares 2 reuniones comunales 3 excretas y basuras 4 prim aux 5 control embarazadas + at. partos 6 niños-registro civil 7 inyectables 8 niños-diarrea 9 no aplicable 10 charlas educativas 11 gestantes nutrición 12 TBC 13 vacunaciones 14 gota gruesa 15 rabia 16 lactancia 17 planificación familiar 18 salud madre-niño 19 charlas 20 más capacitación en general 21 manejar medicamentos 22 enfermedades respiratorias 23 nutrición 24 otros - enfs. transmisibles + respiratorias	6 7
146	D16	Reconocer niño deshidratado 0 no info __ menciona signos-número 88 no sabe	8 9
147		Piel arrugada 0 no info 1 si 2 no	10
148		Ojos hundidos 0 no info 1 si 2 no	11
149		Sed intensa 0 no info 1 si 2 no	12
150		Boca Seca 0 no info 1 si 2 no	13

Var.	Preg.		Tarjeta 4 Columna
151	D16	Dolor Abdominal 0 no info 1 si 2 no menciona	14
152		Falta Apetito 0 no info 1 si 2 no menciona	15
153		Sangre en heces 0 no info 1 si 2 no menciona	16
154		Heces Líquidas 0 no info 1 si 2 no menciona	17
155		Vómitos 0 no info 1 si 2 no menciona	18
156		Fiebre 0 no info 1 si 2 no menciona	19
157		Pérdida de Peso 0 no info 1 si 2 no menciona	20
158		Fontanela Hundida 0 no info 1 si 2 no menciona	21
159		Llora sin lágrimas 0 no info 1 si 2 no menciona	22
160		Otro _____ 0 no info 1 si 2 no menciona	23
161	D17	Curar Diarrea 0 no info __ número de trat. mencionado 8 no sabe	24
162		Sales Rehidratantes 0 no inof 1 si 2 no menciona	25
163		Suero Casero 0 no info 1 si 2 no menciona	26

393

Var.	Preg.		Tarjeta 4 Columna
		Curar Diarrea	
164	D17	Jarabe Antidiarréico 0 no info 1 si 2 no menciona	27
165		Antibióticos 0 no info 1 si 2 no menciona	28
166		Otro 0 no info 1 si 2 no menciona	29
167	D18	Alimentación-Niños con diarrea 0 no info 1 si 2 no menciona	30
168		Siga Alimentación materna 0 no info 1 si 2 no menciona	31
169		Solo líquidos o no info 1 si 2 no menciona	32
170		Quita Alimentación-24 horas 0 no info 1 si 2 no menciona	33
171		Aseo 0 no info 1 si 2 no menciona	34
172		Otro 0 no info 1 si 2 no menciona	35
173	D19	Tres Actividades para Evitar Diarrea 0 no info __ número act. 4 no sabe	36
174		Hervir el agua 0 no info 1 si 2 no menciona	37
175		Lavar manos 0 no info 1 si 2 no menciona	38
176		Protejer comida 0 no info 1 si 2 no menciona	39

Var.	Preg.		Tarjeta 4 Columna
177	D19	Casa Limpia 0 no info 1 si 2 no menciona	40
178		Otro 0 no info 1 si 2 no menciona	41
179	D20	Tratar Niños con Fiebre 0 no info __ número tratamientos 8 no sabe, ninguno	42
180		Quitar Ropa 0 no info 1 si 2 no menciona	43
181		Alcohol - Timolina - Vinagre Boulli 0 no info 1 si 2 no menciona	44
182		Antibióticos + gotas 0 no info 1 si 2 no menciona	45
183		Hierbas 0 no info 1 si 2 no menciona	46
184		Bañarlo - Paños fríos 0 no info 1 si 2 no mencona	47
185	D21	Embarazo-Signos de Alarma 0 no info __ número de signos 88 no sabe, ninguno	48 49
186		Fiebre 0 no info 1 si 2 no menciona	50
187		Sangre por Partos 0 no info 1 si 2 no menciona	51
188		Mareos 0 no info 1 si 2 no menciona	52
189		Vómitos Constantes 0 no info 1 si 2 no menciona	53

395

Tarjeta 4
Columna

Var.	Preg.	Embarazo-signos de alarma	
190	D21	Hinchazones 0 no info 1 si 2 no menciona	54
191		Ataque 0 no info 1 si 2 no menciona	55
192		Dolores de Cabeza 0 no info 1 si 2 no menciona	56
193		Ausencia de Movimientos Fetales 0 no info 1 si 2 no menciona	57
194		Pérdida de liquidos-part s 0 no info 1 si 2 no menciona	58
195		Otro 0 no info 1 si 2 no menciona	59
196		Otro 0 no info 1 si 2 no menciona	60
197	D22	Antes del Parto 0 no info __ no. de casos 8 no sabe 9 no los realiza	61
198		Lavar las manos 0 no info 1 si 2 no menciona	62
199		Hervir las tijeras 0 no info 1 si 2 no menciona	63
200		Palpar el vientre 0 no info 1 si 2 no menciona	64
201		Lavar las partes 0 no info 1 si 2 no menciona	65
202		Otro - Acción 0 no info 1 si 2 no menciona	66

3616

Var.	Preg.		Tarjeta 4 Columna
203	D23	Recién Nacido-Transferencia 0 no info __ # de razones 8 no sabe - ninguno	67
204		No llora 0 no info 1 si 2 no menciona	68
205		Nació antes de 8 meses 0 no info 1 si 2 no menciona	69
206		Piél Amarilla 0 no info 1 si 2 no menciona	70
207		Malformaciones 0 no info 1 si 2 no menciona	71
208		Dificultades al respirar 0 no info 1 si 2 no menciona	72
209		Bajo Peso 0 no info 1 si 2 no menciona	73
210		Otro - Recién Nacido - Vacunas 0 no info 1 si 2 no menciona	74
211	D24	Signos de TBC 0 no info __ no. de signos 8 no sabe ninguno	75
212		Sudoración nocturna 0 no info 1 si 2 no menciona	76
213		Falta de Apetito 0 no info 1 si 2 no menciona	77
214		Tos productiva 0 no info 1 si 2 no menciona	78
215		Pérdida de Peso 0 no info 1 si 2 no menciona	79

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Var.	Preg.	Signos de TBC	Tarjeta 4 Columna
216	D24	Otro 0 no info 1 si 2 no menciona	80
			Tarjeta 5
217	D25	Pacientes con TBC 0 no info 777 no tiene pacientes __ # de pacientes 888 no hay TBC	6 7 8
218	D26	Transferencias 0 no info 1 si 2 no	9
219	D27	Transferencias-último mes Centro Salud 0 no info 99 no aplicable __ número 77 no recuerda 88 ninguno	10 11
220		Posta Sanitaria 0 no info 99 no aplicable __ número 77 no recuerda 88 ninguno	12 13
221		Hospital Local 0 no info 99 no aplicable __ número 77 no recuerda 88 ninguno	14 15
222		Hospital Regional 0 no info 99 no aplicable __ número 77 no recuerda 88 ninguno	16 17
223	D28	Transferencias-Razones Vómitos 0 no info 1 si 2 no menciona	18
224		Heridas 0 no info 1 si 2 no menciona	19
225		TBC 0 no info 1 si 2 no menciona	20
226		Complicaciones Anticonceptivos 0 no info 1 si 2 no menciona	21
227		Infecciones-oido, ojos 0 no info 1 si 2 no menciona	22
228		Deshidratación-niños 0 no info 1 si 2 no menciona	23

Tarjeta 5

Var.	Preg.	Transferencias-Razones	Columna
229	D28	Puntos 0 no info 1 si 2 no menciona	24
230		Papanicolau 0 no info 1 si 2 no menciona	25
231		Control Natal 0 no info 1 si 2 no menciona	26
232		Fiebre 0 no info 1 si 2 no menciona	27
233		Quemaduras 0 no info 1 si 2 no menciona	28
234		Demasiado Dificil - Grave 0 no info 1 si 2 no menciona	29
235		Otros - Razón - Falta médico, medicinas 0 no info 1 si 2 no menciona	30
236	D29	Tarjetas de Transferencia 0 no info 1 si	31
237	D30	Tres Enfermedades más Comunes Primera	32 33

0 no info
1 Malaria
2 Deshidratación
3 gripe
4 diarrea
5 neumonía
6 bronquitis
7 parásitos
8 úlceras
9 no aplicable
10 infección piél
11 TBC
12 heridas
13 reumatismo
14 sarampión
15 gestantes
16 fiebre intestinal
17 fiebre
18 desnutrición
19 cólicos
20 epilepsia
21 tosferina
22 estomacal
23 respiratorias
24 picaduras
25 ojos
26 tifoidea
27 varicela
28 mordeduras perros
29 primeros auxilios
30 otros
31 hepatitis
32 partos

Var.	Preg.	Columna
238	Edad años-meses adultos 0077 niños 0013; todos 0014	34 35 36 37
239	Segunda 0 no info 1 malaria 2 deshidratación 3 gripe 4 diarrea 5 neumonía 6 bronquitis 7 parásitos	38 39

8 úlceras
9 no aplicable
10 infección piél
11 TBC
12 heridas
13
14
15 (ver var. 237)

Tarjeta 5

Var.	Preg.	Tres Enfermedades más Comunes	Columna
240	D30	Edad años meses 0077 adultos; 0013 niños 0014 niños y adultos 0001 0 a 1 mes	40 41 42 43
241		Tercera 0 no info 1 malaria 2 deshidratación 3 gripe 4 diarrea 5 neumonía 6 bronquitis 7 parásitos 8 úlceras 9 no aplicable 10 infección piel 11 TBC 12 heridas 13 14 15	44 45
242		Edad años meses 0077 adultos; 0013 niños 0014 niños y adultos 0001 0 a 1 mes	46 47 48 49
243	D31	Partos Atendidos el año pasado 0 no info __ número 99 no aplicable 88 ninguno	50 51
244	D32	Paternidad Responsable 0 no info 1 no tener demasiados hijos 2 comprensión y cariño 3 tener hijos necesarios 4 responsabilidad 5 dar atención a las gestantes + otros 6 cuidado padres con la familia 7 educar a los hijos 8 no sabe	52
245	D33	Planificación Familiar 0 no info 1 método anticonceptivo 2 planear hijos - usando métodos anticonceptivos 3 [illegible] que paternidad responsable 4 aconsejar niños - educación 5 cuidar, atender y velar por los hijos 6 no tener más hijos 7 otro 8 no sabe	53
246	D34	Pide Info-Planificación Familiar 0 no info 1 si 2 no	54
247	D35	Tipos Materiales- Plan. Fam. 0 no info 1 condones 2 píldoras 3 tab. vaginales 4 condones y píldoras 5 cond. y tab. vaginales 6 píld y tab. vaginales 7 cond, píldoras, tab vaginales 8 otro 9 no aplicable 10 no entrega - no tiene	55 56
248		Condones / mes 0 no info 99 no aplicable ___ número	57 58

Var.	Preg.	Tipos Materiales-Plan Familiar	Tarjeta 5 Columna
249	D35	Paquetes Píldoras 0 no info __ número	59 60
250		Tabletas Vaginales 0 no info __ número 88 no dice - estimado	61 62
251		Otros Materiales 0 no info __ número	63 64
252	D36	Comité de Salud 0 no info 1 si 2 no	65
253	D37	Existencia de Comité de Salud 0 no info 1 si 2 no 9 no aplicable	66
254	D38	Trabaja con Comité de Salud 0 no info 1 si 2 no 9 no aplicable	67
255	D39	Razón no Trabaja con Comité de Salud 0 no info 1 no hacen reuniones 2 no tienen interés 3 dejó de funcionar 4 no tiene tiempo 5 no quieren colaborar 6 no se ponen de acuerdo 7 falta de información 8 recién reunido - falta de coordinación todavía 9 no aplicable	68
256	D40	Colaboración en Organización del Comité de Salud 0 no info 1 si 2 no 9 no aplicable	69
257	D41	Miembros del Comité de Salud Auxiliar de Enfermería 0 no info 1 si 2 no 3 no sabe	70
258		Líderes 0 no info 1 si 2 no 3 no sabe	71
259		Comerciantes 0 no info 1 si 2 no 3 no sabe	72

Var.	Preg.	Miembros del Comité de Salud	Tarjeta 5 Columna
260	D41	Ganaderos 0 no info 3 no sabe 1 si 2 no	73
261		Agricultores 0 no info 3 no sabe 1 si 2 no	74
262		Estudiantes 0 no info 3 no sabe 1 si 2 no	75
263		Obreros 0 no info 3 no sabe 1 si 2 no	7
264		Gente de la Comunidad - Amas de Casa 0 no info 3 no sabe 1 si 2 no	77
265		Otros - Promotor 0 no info 1 si 2 no	78
266		Que hace el Comité 0 no info 1 no hace nada 2 construir posta 3 conseguir medicinas 4 vigilar servicios de salud 5 solicitar ayuda - comunidad 6 no sabe 7 apoyar proyectos comunales 8 otros 9 no aplicable	79
267	D42	Botiquín Comunal 0 no info 1 medicamentos de la Comunidad 2 presta primeros auxilios 3 brinda apoyo 4 formado por la comunidad 5 interés en tener uno 6 donde guardan medicinas y materiales - caja, etc. 7 otros - lista de medicinas 8 no sabe 9 no aplicable	80
			Tarjeta 6
268	D43	Existencia de Botiquín Comunal 0 no info 1 si 2 no	6
269	D44	Responsabilidad-Botiquín Comunal 0 no info 5 comunidad 1 promotor 6 centro salud 2 sanitario 7 otros - org. com./ com. salud 3 doctor 8 no sabe 4 un lider 9 no aplicable	7

46

Var.	Preg.		Tarjeta 6 Columna
270	D45	Si no hay botiquín, había antes 0 no info 1 si 2 no 3 no sabe	8
271		Razón no funciona 0 no info 1 no medicinas 2 falta de interés 3 falta de dinero 4 5 6 7 otros 8 no sabe 9 no aplicable	9
272	E1	Visita-Más Frecuente 0 no info 1 nadie 2 sanitario 3 enfermera del centro 4 personal del área 5 aux de enfermería 6 gente de prelatura 7 gente de org. extrajeras 8 otra organización - profesores y comuneros 9 no aplicable	10
273	E2	Frecuencia-Visitas de Centro Salud 0 no info 88 no especifica cada ____ meses 99 no existe C. de S.	11 12
274	E3	Actividades de Visitantes Primera 0 no info 1 preguntan sobre trabajo 2 enseñan nuevos métodos 3 critican duramente 4 copian y recogen datos 5 abastecen 6 atender pacientes 7 vacunaciones 8 otros 9 no aplicable	13
275		Segunda 0 no info 1 preguntan sobre trabajo 2 enseñan nuevos métodos 3 critican duramente 4 copian y recogen datos 5 abastecen 6 atienden pacientes 7 8 otros 9 no aplicable	14
276	E4	Frecuencia Visitas: Puesto de Salud 0 no info 888 casi nunca __ veces año, mes, semana 999 no visitan	15 16 17 añ/me/sem.
277		Centro Salud 0 no info 888 casi nunca __ veces año, mes, semana	18 19 20

Var.	Preg.	Frecuencia Visitas:	Tarjeta & Columna
278	E4	Hospital Local 0 no info 888 casi nunca __ veces año, mes, semana	21 22 23
279		Hospital del Area 0 no info __ veces año, mes, semana	24 25 26
280	F1	Actividades-Escritas 0 no info 1 si 2 no	27
281	F2	Tipo de Información 0 no info 1 registro de pacientes 9 no aplicable 2 no menciona	28
282		Medicamentos y dosis 0 no info 1 si 2 no menciona	29
283		Actividades Preventivas 0 no info 1 si 2 no menciona	30
284		Transferencias 0 no info 1 si 2 no menciona	31
285		Control de Madres Gestantes 0 no info 1 si 2 no menciona	32
286		Control de Niño Sano 0 no info 1 si 2 no menciona	33
287		Otros 0 no info 1 si 2 no menciona	34
288	G1	Costos Atención 0 no info 0002 no menciona 0001-gratis ____ soles	35 36 37 38
289		Primeros Auxilios 0 no info 0002 no menciona 0001-gratis ____ soles	39 40 41 42
290		Inyecciones 0 no info 0002 no menciona 0001-gratis ____ soles	43 44 45 46

Tarjeta 6

Var.	Preg.	Costos	Columna
291	G1	Medicinas 0 no info 0002 no menciona 0001-gratis ____ soles	47 48 49 50
292		Parto 0 no info 0002 no menciona 0001-gratis ____ soles	51 52 53 54
293		Distribución de Alimentos 0 no info 0002 no menciona 0001-gratis ____ soles	55 56 57 58
294		Curaciones 0 no info 0002 no menciona 0001-gratis ____ soles	59 60 61 62
295		Otro 0 no info 0002 no menciona 0001-gratis ____ soles	63 64 65 66
296	G2	Estipulación de Precios 0 no info 1 yo mismo 2 sanitario 3 comité de salud 4 centro de salud 5 hospital local + regional 6 no cobra - nadie 7 prelatura - CIPCA - Organizaciones 8 otro - organización promotores 9 no aplicable	67
297	G3	Abastecimiento: Materiales y Medicamentos Puesto de Salud Materiales 0 no info 1 si 2 no menciona	68
298		Medicamentos 0 no info 1 si 2 no menciona	69
299		Soles/Mes ___ soles 0001 gratis; 9999 no aplicable 8888 no menciona	70 71 72 73
300		Frecuencia veces año, mes, semana	74 75 76
301		Centro de Salud Materiales 0 no info 1 si 2 no menciona	77
302		Medicamentos 0 no info 1 si 2 no menciona	78 9 9 79 80

Tarjeta 7

Var.	Prog.	Abastecimiento Materiales y Medicamentos	Columna
303	C3	Centro de Salud Soles/mes 0001 gratis	6 7 8 9
304		Frecuencia veces-año, mes, semana 888 no menciona	10 11 12
305		Hospital Regional Materiales 0 no info 1 si 2 no menciona	13
306		Medicamentos 0 no info 1 si 2 no menciona	14
307		Soles/Mes 0001 gratis; 8888 no menciona	15 16 17 18
308		Frecuencia veces-año, mes, semana	19 20 21
309		Bodega - (Tienda en Puno) Materiales 0 no info 1 si 2 no menciona	22
310		Medicamentos 0 no info 1 si 2 no menciona	23
311		Soles/Mes	24 25 26 27
312		Frecuencia veces-año, mes, semana	28 29 30
313		Botiquín Comunal Materiales 0 no info 1 si 2 no menciona	31
314		Medicamentos 0 no info 1 si 2 no menciona	32
315		soles/mes	33 34 35 36
316		Frecuencia ___ veces-año, mes, semana	37 38 39
317		Farmacia Materiales 0 no info 1 si 2 no menciona	40

406

Tarjeta 7

Var.	Preg.	Abastecimiento Materiales y Medicamentos	Columna
318	G3	Farmacia Medicamentos 0 no info 1 si 2 no menciona	41
319		Soles/Mes	42 43 44 45
320		Frecuencia veces año, mes, semana	46 47 48
321		Otro - La Comunidad Materiales 0 no info 1 si 2 no menciona	49
322		Medicamentos 0 no info 1 si 2 no menciona	50
323		Soles/Mes	51 52 53 54
324		Frecuencia veces año, mes, semana	55 56 57
325	G4	Dias en la semana 0 no info __ # de días	58
326	G5	Horas al día 0 no info __ # de horas 8 sin estimación de tiempo	59
327	G6	Tiempo Actividades: 2 semanas Curaciones 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	60 61
328		Charlas Nutrición 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	62 63
329		Charlas Salud 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	64 65
330		Planificación Familiar 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	66 67
331		Saneamiento Ambiental 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	68 69
332		Reuniones 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	70 71

407

Tarjeta 7

Var.	Preg.		Columna
		Tiempo Actividades: 2 semanas	
333	G6	Visitas Domiciliares 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	72 73
334		Atenciones 0 no info 88 sin estimación de tiempo # horas 99 no aplicable	74 75
335		Otro 0 no info # horas	76 77
336	G7	Remuneración 0 no info 1 dinero 2 regalos 3 liberación de minga 4 % ventas medicinas 5 otros - voluntad 6 nada	78
			Tarjeta 8
337		Dinero 0 no info 0001 gratis o nada 9999 no aplicable ____soles/mes 0008 no especifica	6 7 8 9
338		Regalos-alimentación 0 no info 6 comida en general 1 frutas - dulces 8 no especifica 2 papas 3 queso - leche 4 carne 5 huevos	10
339		Regalos-animales domésticos 0 no info 8 no especifica 1 pollo - gallina 2 3 4 5	11
340		Regalos-otros 0 no info 8 no especifica 1 medicinas cuando se enferma 2 café 3 4 5 6	12
341		Liberación de Trabajo Comunal # horas 99 no aplicable	13 14
342	G8	Inyecciones: Mes Pasado 0 no info 88 no estimado; 99 no aplicable ___número 01 ninguna no sabe	15 16
343	G9	Inyectables: Cinco más frecuentes Primero __ vea lista	17 18
344		Frecuencia/mes 88 no especifica	19 20

Var.	Preg.	Inyectables más frecuentes	Tarjeta 8 Columna
345	G9	Segundo ___ vea lista	21 22
346		Frecuencia al mes 88 no especifica	23 24
347		Tercero ___ vea lista	25 26
348		Frecuencia al mes 88 no especifica	27 28
349		Cuarto ___ vea lista	29 30
350		Frecuencia al mes 88 no especifica	31 32
351		Quinto ___ vea lista	33 34
352		Frecuencia al mes 88 no especifica	35 36
353	G10	Actividades Económicas: Pérdida de Tiempo 0 no info 1 si 2 no	37
354	G11	Disminuye Ganancias 0 no info 1 si 2 no	38
355	G12	Cantidad/mes $ 88888 no especifica	39 40 41 42 43
356	H	Promotor 1- activo 2 - pasivo	44
357	H1	Satisfacción 0 no info 1 si 2 no	45
358	H2	Satisfacción Por-Razones 0 no info 1 ayudar a la gente 2 curar enfermedades 3 educar 4 satisfacción personal 5 mejorar la salud 6 mayor comunicación con comunidad - más unión - colaboración 7 más conocimiento 8 otras 9 no aplicable	46
359	H3	Insatisfacción-Razones 0 no info 1 no pago 2 falta apoyo comunidad 3 falta apoyo centro de salud 4 falta apoyo sanitario 5 quita demasiado tiempo 6 problemas familia 7 8 otro - pago + rompieron promesa (MS) 9 no aplicable	47

409

Var.	Preg.		Tarjeta 8 Columna
360	H4	Continuar-Cesar ACTIVO 0 no info 1 continuar 2 cesar 9 no aplicable	48
361	H5	Razones-continuar ACTIVO 0 no info 1 la gente me necesita 2 acuerdo con asamblea 3 me gusta 4 ayudar comunidad (él quiere) 5 más conocimiento 6 siempre y cando le apoyen 7 capacitación 8 otro 9 no aplicable	49
362	H5	Razones-cesar ACTIVO 0 no info 1 falta de pago 2 quita demasiado tiempo 3 no me gusta 4 mal trato de parte de médicos - niegan transferencias 5 no ayudan - apoyo con medicinas 6 falta de materiales 7 8 otro - emigrar - terrorismo - estudios 9 no aplicable	50
363	H4	Razones PASIVO 0 no info 1 falta de pago 2 quitó demasiado tiempo 3 emigró 4 falta de oportunidad mejor 5 no necesitaban personal 6 por enfermedad 7 para estudiar - mejorar 8 se casó 9 no aplicable	51
364	H6	Conocimiento-Promotor Pasivo ACTIVO 0 no info 1 si 2 no	52
365	H7	Razones Abandonar ACTIVO 0 no info 1 demasiado trabajo 2 no pago 3 interfería con otro trabajo 4 no les gustaba 5 edad - enfermedad 6 lo ignora + falta de materiales 7 estudiar 8 matrimonio - viaje - problemas familiares 9 no aplicable	53

Tarjeta 8

Var.	Preg.		Columna
366	H8	Función más importante del Promotor ACTIVO 0 no info 1 curar enfermedades 2 primeros auxilios 3 dar charlas educativas 4 atender niños 5 educar comunidad 6 prevenir 7 ser responsable en su trabajo 8 otros - colaboración con comunidad - capacitarse más - partos 9 no aplicable	54
367	H5	Función más importante PASIVO 0 no info 1 curar enfermedades 2 primeros auxilios 3 dar charlas educativas 4 atender bien a los pacientes 5 dar auxilio inmediato 6 vacunar 7 educar comunidad 8 otro - madre - niño 9 no aplicable	55
368	H9	Problemas - ACTIVO 0 no info 1 falta de pago 2 trabajo duro 3 falta apoyo-comunidad 4 falta medicamentos-materiales 5 falta tiempo 6 pago - apoyo - medicamentos 1+3+4 7 apoyo + medicamentos 8 otros 9 no aplicable	56
369	H6	Problemas - PASIVO 0 no info 1 falta de pago 2 trabajo duro 3 condiciones difíciles 4 falta de medicamentos y materiales 5 falta de viáticos 6 falta de tiempo 7 8 otros 9 no aplicable	57
370	H10	Problemas - Comunidad - ACTIVO 0 no info 1 bajos ingresos económicos 2 falta de servicios médicos 3 falta de medicinas y materiales 4 falta de carreteras 5 falta de electricidad 6 falta de alcantarillado 7 abuso del gobierno 8 agua 9 no aplicable 10 no hay 11 falta control precios alimentos 12 problemas políticos 13 falta de trabajo 14 cultura 15 zona peligrosa - maleantes 16 basura y excretas 17 sequía 18 no tienen de nada 19 falta de coordinación 20 desnutrición 21 local salud 22 otros 23 inundación	58 59

41

Var.	Preg.	Equipo	Tarjeta 8 Columna
371	I1	Primus 0 no info 1-6 cantidad 7 no hay;ha tenido antes 8 nunca ha tenido 9 no aplicable	60
372		Termómetro Oral 0 no info 1-6 cantidad 7 no hay; ha tenido antes 8 nunca ha tenido 9 no aplicable	61
373		Termómetro Rectal 0 no info 1-6 cantidad 7 no hay; ha tenido 8 nunca 9 no aplicable	62
374		Olla de Aluminio 0 no info 1-6 cantidad 7 no hay; hubo 8 nunca 9 no ap.	63
375		Jeringa Hipodérmica 5 cc 0 no info 1-6 cantidad 7 no hay, hubo 8 nunca 9 no ap.	64
376		Jeringa Hipodérmica 10 cc 0 no info 1-6 cantidad 7 no hay, hubo 8 nunca 9 no ap.	65
377		Agujas Hipodérmicas 22x1½ 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	66
378		Agujas Hipodérmicas 20x1½ 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	67
379		Tijeras Rectas 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	68

412

Var.	Preg.	Equipo	Tarjeta 8 Columna
380	I1	Pinza Kocher 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	69
381		Pinza de Disección 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	70
382		Pinza Kelly 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	71
383		Tambor Gasa 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	72
384		Cubeta con Tapa 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	73
385		Linterna de Mano o no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	74
386		Pilas 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	75
387		Cepillo Manos 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	76
388		Cinta Métrica 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	77
389		Maletín o Mochila 0 no info 7 no hay ahora 9 no ap. 1-6 cantidad 8 nunca	78

Var.	Preg.	Equipo	Tarjeta 8 Columna
390	I1	Bicicleta 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	79
391		Otras 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	80
			Tarjeta 9
	I2	Material de Curaciones	
392		Alcohol Yodado 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	6
393		Bencina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	7
394		Sulfa en Polvo 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	8
395		Picrato de Butesin 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	9
396		Algodón 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	10
397		Gasa 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	11
398		Esparadrapo 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	12

Var.	Preg.	Material de Curaciones	Tarjeta 9 Columna
399	I2	Jabón Germicida 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	13
400		Otros 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	14
401	I3	Medicinas Atropina Sulfato 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	15
402		Uso 0 no info 1 si 2 no	16
403		Dimenhidrinato 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	17
404		Uso 0 no info 1 si 2 no	18
405		Homatropina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	19
406		Uso 0 no info 1 si 2 no	20
407		Hioscina N-Butil Bromuro 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	21
408		Uso 0 no info 1 si 2 no	22

Var.	Preg.	Medicinas	Tarjeta 9 Columna
409	I3	Dipirona 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	23
410		Uso 0 no info 1 si 2 no	24
411		Sulfametoxipiridazina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	25
412		Uso 0 no info 1 si 2 no	26
413		Unguento - hepavinoide 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	27
414		Uso 0 no info 1 si 2 no	28
415		Aspirina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	29
416		Uso 0 no info 1 si 2 no	30
417		Dipirona 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	31
418		Uso 0 no info 1 si 2 no	32

416

Tarjeta 9

Var.	Preg.	Medicinas	Columna
419	I3	Malox 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	33
420		Uso 0 no info 1 si 2 no	34
421		Pepsamar 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	35
422		Uso 0 no inf 1 si 2 no	36
423		Aldrox 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	37
424		Uso 0 no info 1 si 2 no	38
425		Anti-Diarréico sin Neomicina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	39
426		Uso 0 no info 1 si 2 no	40
427		Multivitamínico 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	41
428		Uso 0 no info 1 si 2 no	42
429		Acido Undecilénico 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	43

417

Var.	Preg.	Medicinas	Tarjeta 9 Columna
430	I3	Uso - Acido Undecilénico 0 no info 1 si 2 no	44
431		Undecilinato de Zinc 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	45
432		Uso 0 no info 1 si 2 no	46
433		Dexametazona 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	47
434		Uso 0 no info 1 si 2 no	48
435		Gluconato Ferroso 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	49
436		Uso 0 no info 1 si 2 no	50
437		Fitiouinona 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	51
438		Uso 0 no info 1 si 2 no	52
439		Gotas óticas 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	53
440		Uso 0 no info 1 si 2 no	54

418

Var.	Preg.	Medicinas	Tarjeta 9 Columna
441	I3	Fenobarbital 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	55
442		Uso 0 no info 1 si 2 no	56
443		Tiabendazol 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	57
444		Uso 0 no info 1 si 2 no	58
445		Bronhidrato de Dextrometorfano 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	59
446		Uso 0 no info 1 si 2 no	60
447		Clorofeniramina maleato 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	61
448		Uso 0 no info 1 si 2 no	62
449		Ciproheptadina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	63
450		Uso 0 no info 1 si 2 no	64
451		Lidocaina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	65

Tarjeta 9

Var.	Preg.	Medicinas	Columna
452	I3	Uso-Lidocaina 0 no info 1 si 2 no	66
453		Ergometrina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	67
454		Uso 0 no info 1 si 2 no	68
455		Penicilina 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	69
456		Uso 0 no info 1 si 2 no	70
457		Condones 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	71
458		Uso 0 no info 1 si 2 no	72
459		Tabletas Vaginales 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	73
460		Uso 0 no info 1 si 2 no	74
461		Otro 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	75
462		Uso 0 no info 1 si 2 no	76

420

Tarjeta 9
Columna

Var.	Preg.	Medicinas	
463	I3	Otro 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	77
464		Uso 0 no info 1 si 2 no	78
465		Otro 0 no info 1-6 cantidad 7 no hay ahora 8 nunca 9 no ap.	79
466		Uso 0 no info 1 si 2 no	80
			Tarjeta 10
467	--	Grado de Cooperación 0 no info 1 muy bueno 2 bueno 3 regular 4 malo	6
468	D4	Charlas-Temas Saneamiento Ambiental 0 no info 1 si 2 no menciona	7
469		Higiene Personal 0 no info 1 si 2 no menciona	8
470		Salud Materno-Infantil 0 no info 1 si 2 no menciona	9
471		Paternidad Responsable 0 no info 1 si 2 no menciona	10
472		Nutrición 0 no info 1 si 2 no menciona	11
473		Enfermedades Infecciosas 0 no info 1 si 2 no menciona	12
474		Otro 0 no info 1 si 2 no menciona	13

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR012 NUMERO DE HIJOS

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR012: 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1		2 13.3 7.7	5 33.3 6.2	4 26.7 4.6	4 26.7 40.0	15 7.0
SAN MARTIN	2		3 11.1 11.5	14 51.9 17.3	9 33.3 10.3	1 3.7 10.0	27 12.6
HUANUCO-PASCO-UC	3		4 11.8 15.4	11 32.4 13.6	18 52.9 20.7	1 2.9 10.0	34 15.8
CALLAO	4	5 16.7 45.5	5 16.7 19.2	6 20.0 7.4	12 40.0 13.8	2 6.7 20.0	30 14.0
ICA	5	4 18.2 36.4	3 13.6 11.5	9 40.9 11.1	6 27.3 6.9		22 10.2
AREQUIPA	6		2 7.7 7.7	11 42.3 13.6	12 46.2 13.8	1 3.8 10.0	26 12.1
PUNO	7		4 11.1 15.4	16 44.4 19.8	16 44.4 18.4		36 16.7
ANCASH	8	2 8.0 18.2	3 12.0 11.5	9 36.0 11.1	10 40.0 11.5	1 4.0 10.0	25 11.6
	COLUMN TOTAL	11 5.1	26 12.1	81 37.7	87 40.5	10 4.7	215 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
51.17213	28	0.0048	0.698	24 OF 40 (60.0%)

NUMBER OF MISSING OBSERVATIONS = 69

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C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR013 ESCOLARIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR013: 2 DE PRIMARIA	3 5 DE PRIMARIA	4 1-2 DE SECUNDARIA	5 SECUNDARIA COMPL	6 MAS	ROW TOTAL
PIURA-TUMBES	1	5 15.6 20.8	11 34.4 10.3	5 15.6 9.1	11 34.4 14.7		32 11.7
SAN MARTIN	2	4 11.4 16.7	14 40.0 13.1	11 31.4 20.0	6 17.1 8.0		35 12.8
HUANUCO-PASCO-UC	3	1 3.1 4.2	22 68.8 20.6	4 12.5 7.3	5 15.6 6.7		32 11.7
CALLAO	4	1 2.5 4.2	14 35.0 13.1	7 17.5 12.7	16 40.0 21.3	2 5.0 15.4	40 14.6
ICA	5	1 3.0 4.2		1 3.0 1.8	23 69.7 30.7	8 24.2 61.5	33 12.0
AREQUIPA	6	2 6.5 8.3	13 41.9 12.1	7 22.6 12.7	7 22.6 9.3	2 6.5 15.4	31 11.3
PUNO	7	2 4.8 8.3	20 47.6 18.7	13 31.0 23.6	6 14.3 8.0	1 2.4 7.7	42 15.3
ANCASH	8	8 27.6 33.3	13 44.8 12.1	7 24.1 12.7	1 3.4 1.3		29 10.6
	COLUMN TOTAL	24 8.8	107 39.1	55 20.1	75 27.4	13 4.7	274 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
121.26197	28	0.0000	1.376	16 OF 40 (40.0%)

NUMBER OF MISSING OBSERVATIONS = 10

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR014 AÑOS EN LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR014: 1	2	3	4	5	9999	ROW TOTAL
PIURA-TUMBES	1	3 9.4 60.0	1 3.1 2.5	1 3.1 1.9	12 37.5 16.2	15 46.9 14.3		32 11.5
SAN MARTIN	2		12 35.3 30.0	4 11.8 7.5	8 23.5 10.8	10 29.4 9.5		34 12.2
HUANUCO-PASCO-UC	3	1 2.9 20.0	7 20.0 17.5	20 57.1 37.7	5 14.3 6.8	2 5.7 1.9		35 12.6
CALLAO	4		7 17.5 17.5	8 20.0 15.1	16 40.0 21.6	8 20.0 7.6	1 2.5 100.0	40 14.4
ICA	5		4 11.1 10.0	9 25.0 17.0	11 30.6 14.9	12 33.3 11.4		36 12.9
AREQUIPA	6	1 3.2 20.0	8 25.8 20.0	5 16.1 9.4	11 35.5 14.9	6 19.4 5.7		31 11.2
PUNO	7			3 7.1 5.7	8 19.0 10.8	31 73.8 29.5		42 15.1
ANCASH	8		1 3.6 2.5	3 10.7 5.7	3 10.7 4.1	21 75.0 20.0		28 10.1
	COLUMN TOTAL	5 1.8	40 14.4	53 19.1	74 26.6	105 37.8	1 .4	278 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
135.17725	35	0.0000	0.101	20 OF 48 (41.7%)

NUMBER OF MISSING OBSERVATIONS = 6

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR021 IDIOMA PRINCIPAL

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR021 CASTELLANO (1)	QUECHUA (2)	AYMARA (3)	SHIPIVO (4)	AGUARUNA (5)	ROW TOTAL
PIURA-TUMBES	1	28 87.5 14.4	3 9.4 5.9	1 3.1 3.7			32 11.4
SAN MARTIN	2	30 85.7 15.4	3 8.6 5.9			2 5.7 100.0	35 12.5
HUANUCO-PASCO-UC	3	29 82.9 14.9	1 2.9 2.0		5 14.3 100.0		35 12.5
CALLAO	4	40 100.0 20.5					40 14.3
ICA	5	36 100.0 18.5					36 12.9
AREQUIPA	6	21 72.4 10.8	8 27.6 15.7				29 10.4
PUNO	7	2 4.7 1.0	16 37.2 31.4	25 58.1 92.6			43 15.4
ANCASH	8	9 30.0 4.6	20 66.7 39.2	1 3.3 3.7			30 10.7
	COLUMN TOTAL	195 69.6	51 18.2	27 9.6	5 1.8	2 .7	280 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
290.09857	28	0.0	0.207	24 OF 40 (60.0%)

NUMBER OF MISSING OBSERVATIONS = 4

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR022 OTRO IDIOMA

VAR001	COUNT / ROW PCT / COL PCT	VAR022 1 ININGUNO	2 QUECHUA	3 AYMARA	4 AGUARUNA	5 SHIPIVO	ROW TOTAL
PIURA-TUMBES	1	12 100.0 16.9					12 4.8
SAN MARTIN	2	7 26.9 9.9	16 61.5 11.3		2 7.7 100.0	1 3.8 12.5	26 10.5
HUANUCO-PASCO-UC	3	7 20.0 9.9	22 62.9 15.5			6 17.1 75.0	35 14.1
CALLAO	4	22 57.9 31.0	16 42.1 11.3				38 15.3
ICA	5	18 50.0 25.4	17 47.2 12.0	1 2.8 4.0			36 14.5
AREQUIPA	6	4 14.3 5.6	24 85.7 16.9				28 11.3
PUNO	7	1 2.3 1.4	17 39.5 12.0	24 55.8 96.0		1 2.3 12.5	43 17.3
ANCASH	8		30 100.0 21.1				30 12.1
	COLUMN TOTAL	71 28.6	142 57.3	25 10.1	2 .8	8 3.2	248 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
236.61812	28	0.0	0.097	25 OF 40 (62.5%)

NUMBER OF MISSING OBSERVATIONS = 36

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F BY VAR023 TRABAJO PRINCIPAL — PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 AGRIC-CO INSUMO PN	2 AGRICULT . COMERC	3 INDEPENDIENTE	4 AMBULANTE	5 AMA DE CASA	6 TRABAJ.N C ASALARN	7 EDUCACION	8 OTROS EMPLEADO	ROW TOTAL
PIURA-TUMBES	1	11 33.3 10.3	5 15.2 10.2	8 24.2 21.6	1 3.0 33.3	4 12.1 8.5	1 3.0 100.0	3 9.1 8.8		33 11.7
SAN MARTIN	2	27 79.4 25.2	3 8.8 6.1	2 5.9 5.4		2 5.9 4.3				34 12.1
HUANUCO-PASCO-UC	3	3 8.6 2.8	14 40.0 28.6	3 8.6 8.1		6 17.1 12.8		9 25.7 26.5		35 12.4
CALLAO	4	8 20.0 7.5	11 27.5 22.4	3 7.5 8.1		8 20.0 17.0		10 25.0 29.4		40 14.2
ICA	5	2 5.6 1.9	1 2.8 2.0	7 19.4 18.9	1 2.8 33.3	21 58.3 44.7		3 8.3 8.8	1 2.8 25.0	36 12.8
AREQUIPA	6	13 41.9 12.1	3 9.7 6.1	4 12.9 10.8		6 19.4 12.8		2 6.5 5.9	3 9.7 75.0	31 11.0
PUNO	7	35 81.4 32.7	1 2.3 2.0	3 7.0 8.1				4 9.3 11.8		43 15.2
ANCASH	8	8 26.7 7.5	11 36.7 22.4	7 23.3 18.9	1 3.3 33.3			3 10.0 8.8		30 10.6
	COLUMN TOTAL	107 37.9	49 17.4	37 13.1	3 1.1	47 16.7	1 .4	34 12.1	4 1.4	282 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
203.16225	49	0.0000	0.136	37 OF 64 (57.8%)

NUMBER OF MISSING OBSERVATIONS =

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR024 SALUD-FAMILIA

VAR001	COUNT / ROW PCT / COL PCT	VAR024 SI (1)	VAR024 NO (2)	ROW TOTAL
PIURA-TUMBES	1	9	22	31
		29.0	71.0	11.1
		11.4	10.9	
SAN MARTIN	2	10	24	34
		29.4	70.6	12.1
		12.7	11.9	
HUANUCO-PASCO-UC	3	11	24	35
		31.4	68.6	12.5
		13.9	11.9	
CALLAO	4	16	24	40
		40.0	60.0	14.3
		20.3	11.9	
ICA	5	14	22	36
		38.9	61.1	12.9
		17.7	10.9	
AREQUIPA	6	10	21	31
		32.3	67.7	11.1
		12.7	10.4	
PUNO	7	7	36	43
		16.3	83.7	15.4
		8.9	17.9	
ANCASH	8	2	28	30
		6.7	93.3	10.7
		2.5	13.9	
	COLUMN TOTAL	79	201	280
		28.2	71.8	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
15.13322	7	0.0343	8.464	NONE

NUMBER OF MISSING OBSERVATIONS = 4

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR025 TIEMPO-PROMOTOR AÑOS/MESES

VAR001	COUNT / ROW PCT / COL PCT	VAR025 1	2	3	4	ROW TOTAL
PIURA-TUMBES	1	10 31.3 15.2	12 37.5 7.6	3 9.4 8.6	7 21.9 41.2	32 11.6
SAN MARTIN	2	14 41.2 21.2	19 55.9 12.0	1 2.9 2.9		34 12.3
HUANUCO-PASCO-UC	3	7 21.2 10.6	20 60.6 12.7	5 15.2 14.3	1 3.0 5.9	33 12.0
CALLAO	4	16 40.0 24.2	23 57.5 14.6	1 2.5 2.9		40 14.5
ICA	5	1 2.9 1.5	31 91.2 19.6	2 5.9 5.7		34 12.3
AREQUIPA	6	15 48.4 22.7	8 25.8 5.1	3 9.7 8.6	5 16.1 29.4	31 11.2
PUNO	7	2 4.8 3.0	17 40.5 10.8	19 45.2 54.3	4 9.5 23.5	42 15.2
ANCASH	8	1 3.3 1.5	28 93.3 17.7	1 3.3 2.9		30 10.9
	COLUMN TOTAL	66 23.9	158 57.2	35 12.7	17 6.2	276 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
131.00575	21	0.0000	1.848	14 OF 32 (43.8%)

NUMBER OF MISSING OBSERVATIONS = 8

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR026 SALUD ANTES CAPACITACION

VAR001	COUNT / ROW PCT / COL PCT	VAR026 SI (1)	VAR026 NO (2)	ROW TOTAL
PIURA-TUMBES	1	18 58.1 14.8	13 41.9 8.3	31 11.2
SAN MARTIN	2	18 52.9 14.8	16 47.1 10.3	34 12.2
HUANUCO-PASCO-UC	3	16 45.7 13.1	19 54.3 12.2	35 12.6
CALLAO	4	11 28.2 9.0	28 71.8 17.9	39 14.0
ICA	5	19 52.8 15.6	17 47.2 10.9	36 12.9
AREQUIPA	6	21 67.7 17.2	10 32.3 6.4	31 11.2
PUNO	7	11 26.2 9.0	31 73.8 19.9	42 15.1
ANCASH	8	8 26.7 6.6	22 73.3 14.1	30 10.8
	COLUMN TOTAL	122 43.9	156 56.1	278 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
24.87678	7	0.0008	13.165	NONE

NUMBER OF MISSING OBSERVATIONS = 6

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR027 TRABAJO ANTERIOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR027 CURANDER 1	YERBARIE NO 2	PARTERO 3	MUESERO 4	COMITE D E SALUD 5	EJERCITO 6	AUX. DE ENFERMER 7	OTROS 8	ROW TOTAL
PIURA-TUMBES	1			1 5.6 25.0	2 11.1 50.0	5 27.8 33.3	4 22.2 14.3	6 33.3 42.9		18 14.4
SAN MARTIN	2	1 5.3 4.8	1 5.3 16.7			2 10.5 13.3	2 10.5 7.1	3 15.8 21.4	10 52.6 30.3	19 15.2
HUANUCO-PASCO-UC	3	9 52.9 42.9	1 5.9 16.7	1 5.9 25.0		2 11.8 13.3	3 17.6 10.7		1 5.9 3.0	17 13.6
CALLAO	4	2 18.2 9.5	1 9.1 16.7		1 9.1 25.0		5 45.5 17.9		2 18.2 6.1	11 8.8
ICA	5					2 10.5 13.3		2 10.5 14.3	15 78.9 45.5	19 15.2
AREQUIPA	6	4 19.0 19.0	1 4.8 16.7	1 4.8 25.0		2 9.5 13.3	7 33.3 25.0	3 14.3 21.4	3 14.3 9.1	21 16.8
PUNO	7	1 8.3 4.8	2 16.7 33.3			2 16.7 13.3	5 41.7 17.9		2 16.7 6.1	12 9.6
ANCASH	8	4 50.0 19.0		1 12.5 25.0	1 12.5 25.0		2 25.0 7.1			8 6.4
	COLUMN TOTAL	21 16.8	6 4.8	4 3.2	4 3.2	15 12.0	28 22.4	14 11.2	33 26.4	125 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
115.43512	49	0.0000	0.256	61 OF 64 (95.3%)

NUMBER OF MISSING OBSERVATIONS = 159

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR028 CONTINUACION

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR028 1 SI	VAR028 2 NO	ROW TOTAL
PIURA-TUMBES	1	15 / 71.4 / 15.2	6 / 28.6 / 24.0	21 / 16.9
SAN MARTIN	2	17 / 94.4 / 17.2	1 / 5.6 / 4.0	18 / 14.5
HUANUCO-PASCO-UC	3	15 / 88.2 / 15.2	2 / 11.8 / 8.0	17 / 13.7
CALLAO	4	8 / 80.0 / 8.1	2 / 20.0 / 8.0	10 / 8.1
ICA	5	12 / 63.2 / 12.1	7 / 36.8 / 28.0	19 / 15.3
AREQUIPA	6	15 / 71.4 / 15.2	6 / 28.6 / 24.0	21 / 16.9
PUNO	7	11 / 91.7 / 11.1	1 / 8.3 / 4.0	12 / 9.7
ANCASH	8	6 / 100.0 / 6.1		6 / 4.8
	COLUMN TOTAL	99 / 79.8	25 / 20.2	124 / 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
10.81836	7	0.1467	1.210	9 OF 16 (56.3%)

NUMBER OF MISSING OBSERVATIONS = 160

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR029 CAPACITACION AND/MES

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR029 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	2 7.7 33.3	3 11.5 75.0	3 11.5 5.0	1 3.8 1.6	17 65.4 18.7	26 11.6
SAN MARTIN	2	1 3.0 16.7		5 15.2 8.3		27 81.8 29.7	33 14.7
HUANUCO-PASCO-UC	3			15 53.6 25.0	7 25.0 11.1	6 21.4 6.6	28 12.5
CALLAC	4				19 65.5 30.2	10 34.5 11.0	29 12.9
ICA	5			5 22.7 8.3	5 22.7 7.9	12 54.5 13.2	22 9.8
AREQUIPA	6	1 4.0 16.7		9 36.0 15.0		15 60.0 16.5	25 11.2
PUNO	7	2 6.3 33.3	1 3.1 25.0	23 71.9 38.3	4 12.5 6.3	2 6.3 2.2	32 14.3
ANCASH	8				27 93.1 42.9	2 6.9 2.2	29 12.9
	COLUMN TOTAL	6 2.7	4 1.8	60 26.8	63 28.1	91 40.6	224 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
200.46658	28	0.0	0.393	16 OF 40 (40.0%)

NUMBER OF MISSING OBSERVATIONS = 60

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR030 PRIMERA CAPACITACION: DURACION

VAR001	COUNT / ROW PCT / COL PCT	VAR030 1	2	3	4	5	6	ROW TOTAL
PIURA-TUMBES	1		3 10.7 10.3	15 53.6 15.3	4 14.3 7.8	5 17.9 25.0	1 3.6 6.7	28 11.6
SAN MARTIN	2			26 78.8 26.5	5 15.2 9.8		2 6.1 13.3	33 13.7
HUANUCO-PASCO-UC	3	7 21.9 25.0	1 3.1 3.4	15 46.9 15.3	2 6.3 3.9	2 6.3 10.0	5 15.6 33.3	32 13.3
CALLAO	4	3 9.7 10.7	6 19.4 20.7	19 61.3 19.4		3 9.7 15.0		31 12.9
ICA	5	12 42.9 42.9	11 39.3 37.9		2 7.1 3.9	1 3.6 5.0	2 7.1 13.3	28 11.6
AREQUIPA	6	4 16.0 14.3	5 20.0 17.2	10 40.0 10.2	2 8.0 3.9	2 8.0 10.0	2 8.0 13.3	25 10.4
PUNO	7	2 5.7 7.1	3 8.6 10.3	8 22.9 8.2	13 37.1 25.5	7 20.0 35.0	2 5.7 13.3	35 14.5
ANCASH	8			5 17.2 5.1	23 79.3 45.1		1 3.4 6.7	29 12.0
	COLUMN TOTAL	28 11.6	29 12.0	98 40.7	51 21.2	20 8.3	15 6.2	241 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
191.53727	35	0.0000	1.556	32 OF 48 (66.7%)

NUMBER OF MISSING OBSERVATIONS = 43

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR031 PRIMERA CAPACITACION: ENTIDAD

VAR001	COUNT / ROW PCT / COL PCT	VAR031 1 MIN.DE SALUD	2 HOSP. LO CAL/REGI	3 EJERCITO	5 AID	6 ORG.RELI GUIOSAS	7 ORG. EXT RANJERAS	8 PRELATURA	9 NO APLICABLE	10 CENTRO S SALUD	12 INST.NEO PLASIO	ROW TOTAL
PIURA-TUMBES	1	7 25.0 9.6	4 14.3 4.1	2 7.1 50.0			5 17.9 71.4			6 21.4 17.1	2 7.1 100.0	28 11.6
SAN MARTIN	2	15 48.4 20.5	7 22.6 7.1						1 3.2 100.0	8 25.8 22.9		31 12.9
HUANUCO-PASCO-UC	3	1 2.9 1.4	19 55.9 19.4	1 2.9 25.0		5 14.7 100.0				1 2.9 2.9		34 14.1
CALLAO	4	15 50.0 20.5	8 26.7 8.2		2 6.7 100.0					3 10.0 8.6		30 12.4
ICA	5	14 50.0 19.2	13 46.4 13.3									28 11.6
AREQUIPA	6	8 33.3 11.0	6 25.0 5.1				2 8.3 28.6			8 33.3 22.9		24 10.0
PUNO	7	6 16.2 8.2	19 51.4 19.4	1 2.7 25.0				1 2.7 100.0		9 24.3 25.7		37 15.4
ANCASH	8	7 24.1 9.6	22 75.9 22.4									29 12.0
(CONTINUED)	COLUMN TOTAL	73 30.3	98 40.7	4 1.7	2 .8	5 2.1	7 2.9	1 .4	1 .4	35 14.5	2 .8	241 100.0

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR031 PRIMERA CAPACITACION: ENTIDAD

VAR001	COUNT / ROW PCT / COL PCT	VAR031 1 ACADEMIA IS-INSTIT 13	2 CORRESPO NDENCIA 14	3 DOCTOR 15	4 PARTIDOS POLITIC 16	ROW TOTAL
PIURA-TUMBES	1	1 3.6 11.1	1 3.6 50.0			28 11.6
SAN MARTIN	2					31 12.9
HUANUCO-PASCO-UC	3	6 17.6 66.7	1 2.9 50.0			34 14.1
CALLAO	4			1 3.3 100.0	1 3.3 100.0	30 12.4
ICA	5	1 3.6 11.1				28 11.6
AREQUIPA	6					24 10.0
PUNO	7	1 2.7 11.1				37 15.4
ANCASH	8					29 12.0
	COLUMN TOTAL	9 3.7	2 .8	1 .4	1 .4	241 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
219.68948	91	0.0000	0.100	95 OF 112 (84.8%)

NUMBER OF MISSING OBSERVATIONS = 43

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F BY VAR035 PRIMER REFRESCAMIENTO: FECHA

VAR001	COUNT / ROW PCT / COL PCT	VAR035 1	3	4	5	ROW TOTAL
PIURA-TUMBES	1			1 9.1 12.5	10 90.9 18.9	11 16.2
HUANUCO-PASCO-UC	3		2 16.7 33.3		10 83.3 18.9	12 17.6
CALLAO	4			3 100.0 37.5		3 4.4
ICA	5				4 100.0 7.5	4 5.9
AREQUIPA	6			2 22.2 25.0	7 77.8 13.2	9 13.2
PUNO	7	1 7.7 100.0	4 30.8 66.7	2 15.4 25.0	6 46.2 11.3	13 19.1
ANCASH	8				16 100.0 30.2	16 23.5
	COLUMN TOTAL	1 1.5	6 8.8	8 11.8	53 77.9	68 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
46.17745	18	0.0003	0.044	23 OF 28 (82.1%)

NUMBER OF MISSING OBSERVATIONS = 216

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR036 PRIMER REFRESCAMIENTO: DURACION

VAR001	COUNT / ROW PCT / COL PCT	VAR036 1	VAR036 2	VAR036 3	ROW TOTAL
PIURA-TUMBES	1	5 38.5 15.6	4 30.8 11.1	4 30.8 26.7	13 15.7
HUANUCO-PASCO-UC	3	4 28.6 12.5	5 35.7 13.9	5 35.7 33.3	14 16.9
CALLAO	4	2 50.0 6.3	1 25.0 2.8	1 25.0 6.7	4 4.8
ICA	5		4 100.0 11.1		4 4.8
AREQUIPA	6	1 12.5 3.1	4 50.0 11.1	3 37.5 20.0	8 9.6
PUNO	7	20 83.3 62.5	2 8.3 5.6	2 8.3 13.3	24 28.9
ANCASH	8		16 100.0 44.4		16 19.3
	COLUMN TOTAL	32 38.6	36 43.4	15 18.1	83 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
54.95870	12	0.0000	0.723	13 OF 21 (61.9%)

NUMBER OF MISSING OBSERVATIONS = 201

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR037 PRIMER REFRESCAMIENTO: ENTIDAD

VAR001	COUNT / ROW PCT / COL PCT	VAR037 1 MIN. SALUD	2 HOSPITAL LOCAL	4 UNICEF	7 ORG.EXTRANJERAS	8 PRELATURA	10 CENTRO DE SALUD	12 CIPCA	13 HOSPITAL AMAZONIOS	14 INSTITUTOS	15 COM.INT. DESARROL	ROW TOTAL
PIURA-TUMBES	1	4 33.3 25.0	1 8.3 2.2		1 8.3 50.0			5 41.7 100.0		1 8.3 100.0		12 14.6
HUANUCO-PASCO-UC	3		11 78.6 24.4				1 7.1 16.7		2 14.3 100.0			14 17.1
CALLAO	4		2 50.0 4.4				1 25.0 16.7				1 25.0 100.0	4 4.9
ICA	5	4 100.0 25.0										4 4.9
AREQUIPA	6	4 50.0 25.0	2 25.0 4.4				2 25.0 33.3					8 9.8
PUNO	7	3 12.5 18.8	14 58.3 31.1	1 4.2 100.0	1 4.2 50.0	1 4.2 100.0	2 8.3 33.3					24 29.3
ANCASH	8	1 6.3 6.3	15 93.8 33.3									16 19.5
(CONTINUED)	COLUMN TOTAL	16 19.5	45 54.9	1 1.2	2 2.4	1 1.2	6 7.3	5 6.1	2 2.4	1 1.2	1 1.2	82 100.0

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR037 PRIMER REFRESCAMIENTO: ENTIDAD
PAGE 2 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR037 16	ROW TOTAL
PIURA-TUMBES	1		12 / 14.6
HUANUCO-PASCO-UC	3		14 / 17.1
CALLAO	4		4 / 4.9
ICA	5		4 / 4.9
AREQUIPA	6		8 / 9.8
PUNO	7	2 / 8.3 / 100.0	24 / 29.3
ANCASH	8		16 / 19.5
COLUMN TOTAL		2 / 2.4	82 / 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
122.47625	60	0.0000	0.049	73 OF 77 (94.8%)

NUMBER OF MISSING OBSERVATIONS = 202

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR041 PROCESO DE SELECCION PAGE 1 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR041 CONCURSO (1)	ASAMB.MAS REPR.SO (2)	SANITARIO (3)	VOLUNTARIA (4)	ASAMBLEA COMUNAL (5)	MEDICOS DE PASO (6)	MINISTERIO DE SA (7)	COM.DE SAL. Y SA (8)	NO APLICABLE (9)	AUTORIZADO - EJER (10)	ROW TOTAL
PIURA-TUMBES	1	8 25.8 27.6	3 9.7 6.7			18 58.1 12.9	1 3.2 33.3	1 3.2 33.3				31 11.9
SAN MARTIN	2	4 12.1 13.8	5 15.2 11.1	2 6.1 66.7		17 51.5 12.2	2 6.1 66.7		1 3.0 50.0		2 6.1 9.1	33 12.6
HUANUCO-PASCO-UC	3	3 8.6 10.3			2 5.7 16.7	25 71.4 18.0					4 11.4 18.2	35 13.4
CALLAO	4	1 2.7 3.4				20 54.1 14.4		1 2.7 33.3		1 2.7 100.0	13 35.1 59.1	37 14.2
ICA	5	6 22.2 20.7	3 11.1 6.7	1 3.7 33.3	1 3.7 8.3	14 51.9 10.1		1 3.7 33.3	1 3.7 50.0			27 10.3
AREQUIPA	6	6 22.2 20.7	8 29.6 17.8		6 22.2 50.0	5 18.5 3.6					2 7.4 9.1	27 10.3
PUNO	7	1 2.4 3.4	1 2.4 2.2		3 7.1 25.0	36 85.7 25.9					1 2.4 4.5	42 16.1
ANCASH	8		25 86.2 55.6			4 13.8 2.9						29 11.1
(CONTINUED)	COLUMN TOTAL	29 11.1	45 17.2	3 1.1	12 4.6	139 53.3	3 1.1	3 1.1	2 .8	1 .4	22 8.4	261 100.0

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR041 PROCESO DE SELECCION

PAGE 2 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR041 IGLESIA III	ROW TOTAL
PIURA-TUMBES	1		31 11.9
SAN MARTIN	2		33 12.6
HUANUCO-PASCO-UC	3	1 2.9 50.0	35 13.4
CALLAO	4	1 2.7 50.0	37 14.2
ICA	5		27 10.3
AREQUIPA	6		27 10.3
PUNO	7		42 16.1
ANCASH	8		29 11.1
	COLUMN TOTAL	2 .8	261 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
258.49645	70	0.0000	0.103	74 OF 88 (84.1%)

NUMBER OF MISSING OBSERVATIONS = 23

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR042 RAZON-SELECCION — PAGE 1 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR042: INT.EN AVUDAR CO (1)	A GANO CON CURSC (2)	LABOR DE SEMPENAD (3)	POR SER LIDER (4)	CONOCIMI ENTOS (5)	TRABAJ.C OMO AUXI (6)	DISPONIB IL.DE TI (7)	SER RESP ONS.Y BU (8)	COERCION (10)	OTROS (11)	ROW TOTAL
PIURA-TUMBES	1	3 / 9.4 / 14.3	1 / 3.4 / 11.1			21 / 65.6 / 20.0		2 / 6.3 / 11.8	3 / 9.4 / 5.1	2 / 6.3 / 12.5		32 / 12.1
SAN MARTIN	2	4 / 11.4 / 19.0		2 / 5.7 / 16.7	1 / 2.9 / 33.3	16 / 45.7 / 15.2		4 / 11.4 / 23.5	8 / 22.9 / 13.6			35 / 13.2
HUANUCO-PASCO-UC	3	2 / 5.7 / 9.5	4 / 11.4 / 44.4			15 / 42.9 / 14.3			12 / 34.3 / 20.3	1 / 2.9 / 6.3	1 / 2.9 / 8.3	35 / 13.2
CALLAO	4	3 / 8.3 / 14.3		3 / 8.3 / 25.0		9 / 25.0 / 8.6	3 / 8.3 / 100.0		6 / 16.7 / 10.2	7 / 19.4 / 43.8	5 / 13.9 / 41.7	36 / 13.6
ICA	5	2 / 7.4 / 9.5	3 / 11.1 / 33.3	4 / 14.8 / 33.3		9 / 33.3 / 8.6		3 / 11.1 / 17.6	4 / 14.8 / 6.8	1 / 3.7 / 6.3	1 / 3.7 / 8.3	27 / 10.2
AREQUIPA	6	1 / 3.3 / 4.8		2 / 6.7 / 16.7		13 / 43.3 / 12.4		6 / 20.0 / 35.3	1 / 3.3 / 1.7			30 / 11.3
PUNO	7	5 / 12.2 / 23.8	1 / 2.4 / 11.1	1 / 2.4 / 8.3	2 / 4.9 / 66.7	10 / 24.4 / 9.5		1 / 2.4 / 5.9	13 / 31.7 / 22.0	4 / 9.8 / 25.0	3 / 7.3 / 25.0	41 / 15.5
ANCASH	8	1 / 3.4 / 4.8				12 / 41.4 / 11.4		1 / 3.4 / 5.9	12 / 41.4 / 20.3	1 / 3.4 / 6.3	2 / 6.9 / 16.7	29 / 10.9
(CONTINUED)	COLUMN TOTAL	21 / 7.9	9 / 3.4	12 / 4.5	3 / 1.1	105 / 39.6	3 / 1.1	17 / 6.4	59 / 22.3	16 / 6.0	12 / 4.5	265 / 100.0

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR042 RAZON-SELECCION
PAGE 2 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR042 111	VAR042 991	ROW TOTAL
PIURA-TUMBES	1			32 / 12.1
SAN MARTIN	2			35 / 13.2
HUANUCO-PASCO-UC	3			35 / 13.2
CALLAO	4			36 / 13.6
ICA	5			27 / 10.2
AREQUIPA	6		7 / 23.3 / 100.0	30 / 11.3
PUNO	7	1 / 2.4 / 100.0		41 / 15.5
ANCASH	8			29 / 10.9
	COLUMN TOTAL	1 / .4	7 / 2.6	265 / 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
1v3.38635	77	0.0000	0.102	80 OF 96 (83.33)

NUMBER OF MISSING OBSERVATIONS = 19

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR043 CAPACITACION-ADECUACIA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR043 SI (1)	NO (2)	ROW TOTAL
PIURA-TUMBES	1	26	5	32
		81.3	18.8	12.2
		12.7	10.2	
SAN MARTIN	2	21	13	34
		61.8	38.2	12.9
		10.3	22.0	
HUANUCO-PASCO-UC	3	27	8	35
		77.1	22.9	13.3
		13.2	13.6	
CALLAO	4	35	2	37
		94.6	5.4	14.1
		17.2	3.4	
ICA	5	18	9	27
		66.7	33.3	10.3
		8.8	15.3	
AREQUIPA	6	20	8	28
		71.4	28.6	10.6
		9.8	13.6	
PUNO	7	32	9	41
		78.0	22.0	15.6
		15.7	15.3	
ANCASH	8	25	4	29
		86.2	13.8	11.0
		12.3	6.8	
	COLUMN TOTAL	204	59	263
		77.6	22.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
14.95681	7	0.0360	6.057	NONE

NUMBER OF MISSING OBSERVATIONS = 21

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR044 RESOLVER PROBLEMAS SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR044: 1 APOYO MA IT.-PRIM.	2 MEDICAM NTOS	3 APOYO PU REFESIONA	4 COORD.CO N GRUP.C	5 VISITAS DOMICILI	6 CONSTRUC C. DE PO	7 MANDAR M EDICO PE	9 NU APLIC ABLE	10 CAPACITA CION	11 AGUA Y D ESAGUE	RCW TOTAL
PIURA-TUMBES	1	5 15.6 16.1	5 15.6 12.2	4 12.5 19.0	4 12.5 22.2		3 9.4 16.7			8 25.0 9.4	3 9.4 50.0	32 12.1
SAN MARTIN	2	4 11.4 12.9	12 34.3 29.3		1 2.9 5.6		2 5.7 11.1	2 5.7 66.7		10 28.6 11.4		35 13.2
HUANUCO-PASCO-UC	3	7 20.0 22.6	2 5.7 4.9	4 11.4 19.0	4 11.4 22.2		1 2.9 5.6			10 28.6 11.4	1 2.9 16.7	35 13.2
CALLAO	4	5 13.5 16.1	4 10.8 9.8	2 5.4 9.5	2 5.4 11.1		6 16.2 33.3			12 32.4 13.6		37 14.0
ICA	5	4 14.8 12.9	2 7.4 4.9	1 3.7 4.8	2 7.4 11.1	1 3.7 100.0	3 11.1 16.7	1 3.7 33.3		10 37.0 11.4		27 10.2
AREQUIPA	6	2 6.9 6.5	8 27.6 19.5	5 17.2 23.8	2 6.9 11.1					9 31.0 10.2		29 10.9
PUNO	7	3 7.1 9.7	5 11.9 12.2	3 7.1 14.3	1 2.4 5.6		1 2.4 5.6		1 2.4 100.0	16 38.1 18.2		42 15.8
ANCASH	8	1 3.6 3.2	3 10.7 7.3	2 7.1 9.5	2 7.1 11.1		2 7.1 11.1			13 46.4 14.8	2 7.1 33.3	28 10.6
(CONTINUED)	COLUMN TOTAL	31 11.7	41 15.5	21 7.9	18 6.8	1 .4	18 6.8	3 1.1	1 .4	88 33.2	6 2.3	265 100.0

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR044 RESOLVER PROBLEMAS SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR044: MAS MAT. PATERNI. (12)	CHARLAS EDUCATIV (13)	MAS PERSONAL (14)	PREVENCION (15)	NO SABE (16)	CTRO + P ERF.PROM (17)	ROW TOTAL
PIURA-TUMBES	1							32 12.1
SAN MARTIN	2		3 8.6 30.0	1 2.9 33.3				35 13.2
HUANUCO-PASCO-UC	3		1 2.9 10.0		2 5.7 15.4		3 8.6 37.5	35 13.2
CALLAO	4		1 2.7 10.0		2 5.4 15.4		3 8.1 37.5	37 14.0
ICA	5	1 3.7 100.0	1 3.7 10.0	1 3.7 33.3				27 10.2
AREQUIPA	6		1 3.4 10.0	1 3.4 33.3	1 3.4 7.7			29 10.9
PUNO	7		1 7.1 30.0		5 11.9 38.5	2 4.8 100.0	2 4.8 25.0	42 15.8
ANCASH	8				3 10.7 23.1			28 10.6
	COLUMN TOTAL	1 .4	10 3.8	3 1.1	13 4.9	2 .8	8 3.0	265 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
139.34595	105	0.0140	0.102	116 OF 128 (90.6%)

NUMBER OF MISSING OBSERVATIONS = 19

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR045 CURSOS-REFRESCAMIENTO

VAR001	COUNT / ROW PCT / COL PCT	VAR045 ACTUALIZO REF.DE 1	NUEV.CONOC.Y APP 2	NO OLVIDAR LO APRION 3	SUPERVISION 5	OTRO-ESTRIL.MEDIO 6	NO SABE BIEN 8	NO APLICABLE 9	ROW TOTAL
PIURA-TUMBES	1	13 40.6 23.1	13 40.6 24.1	4 12.5 3.8	1 3.1 100.0		1 3.1 2.5		32 12.1
SAN MARTIN	2	7 20.6 13.0	7 20.6 13.0				20 58.8 50.0		34 12.8
HUANUCO-PASCO-UC	3		7 20.0 13.0	22 62.9 21.0		1 2.9 12.5	4 11.4 10.0	1 2.9 33.3	35 13.2
CALLAO	4	1 2.8 1.9	2 5.6 3.7	22 61.1 21.0		2 5.6 25.0	9 25.0 22.5		36 13.6
ICA	5	6 22.2 11.1	4 14.8 7.4	16 59.3 15.2		1 3.7 12.5			27 10.2
AREQUIPA	6	19 61.3 35.2	2 6.5 3.7	4 12.9 3.8		2 6.5 25.0	2 6.5 5.0	2 6.5 66.7	31 11.7
PUNO	7	7 16.7 13.0	15 38.1 29.6	15 35.7 14.3		2 4.8 25.0	2 4.8 5.0		42 15.8
ANCASH	8	1 3.6 1.9	3 10.7 5.6	22 78.6 21.0			2 7.1 5.0		28 10.6
	COLUMN TOTAL	54 20.4	54 20.4	105 39.6	1 .4	8 3.0	40 15.1	3 1.1	265 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
199.62619	42	0.0000	0.102	28 OF 56 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 19

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR046 OTROS CURSOS

VAR001 \ VAR046	SI (1)	NO (2)	. (9)	ROW TOTAL
1 PIURA-TUMBES	19 59.4 19.6	13 40.6 7.8		32 11.9
2 SAN MARTIN		35 100.0 21.1		35 13.1
3 HUANUCO-PASCO-UC	10 28.6 10.3	24 68.6 14.5	1 2.9 20.0	35 13.1
4 CALLAO	7 18.9 7.2	30 81.1 18.1		37 13.8
5 ICA	5 18.5 5.2	22 81.5 13.3		27 10.1
6 AREQUIPA	12 38.7 12.4	17 54.8 10.2	2 6.5 40.0	31 11.6
7 PUNO	25 59.5 25.8	15 35.7 9.0	2 4.8 40.0	42 15.7
8 ANCASH	19 65.5 19.6	10 34.5 6.0		29 10.8
COLUMN TOTAL	97 36.2	166 61.9	5 1.9	268 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
68.25317	14	0.0000	0.504	8 OF 24 (33.3%)

NUMBER OF MISSING OBSERVATIONS = 16

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR047 NO ASISTENCIA-REFRESCAMIENTO-DEF

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 INU HAN LLAMADO	2 NO HAN DADO	4 RECIBIO MATER.CA	5 FALTA INTERES	6 IMPOSIBIL.POR TR	7 FALTA TIEMPO	8 OTROS - SALUD	ROW TOTAL
PIURA-TUMBES	1	2 16.7 3.4	2 16.7 3.3	1 8.3 100.0	3 25.0 75.0	2 16.7 22.2	2 16.7 33.3		12 8.1
SAN MARTIN	2	20 58.8 34.5	14 41.2 23.0						34 23.0
HUANUCO-PASCO-UC	3	8 38.1 13.8	7 33.3 11.5			2 9.5 22.2	1 4.8 16.7	3 14.3 33.3	21 14.2
CALLAO	4	10 38.5 17.2	11 42.3 18.0		1 3.8 25.0	1 3.8 11.1	1 3.8 16.7	2 7.7 22.2	26 17.6
ICA	5	4 18.2 6.9	18 81.8 29.5						22 14.9
AREQUIPA	6	5 31.3 8.6	6 37.5 9.8			2 12.5 22.2	1 6.3 16.7	2 12.5 22.2	16 10.8
PUNO	7	2 28.6 3.4	3 42.9 4.9			1 14.3 11.1	1 14.3 16.7		7 4.7
ANCASH	8	7 70.0 12.1				1 10.0 11.1		2 20.0 22.2	10 6.8
	COLUMN TOTAL	58 39.2	61 41.2	1 .7	4 2.7	9 6.1	6 4.1	9 6.1	148 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
90.85907	42	0.0000	0.047	46 OF 56 (82.1%)

NUMBER OF MISSING OBSERVATIONS = 136

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR048 CHARLAS

VAR001	COUNT / ROW PCT / COL PCT	VAR048 SI (1)	VAR048 NO (2)	ROW TOTAL
PIURA-TUMBES	1	19 65.5 9.6	10 34.5 21.3	29 11.8
SAN MARTIN	2	31 91.2 15.7	3 8.8 6.4	34 13.9
HUANUCO-PASCO-UC	3	24 82.8 12.1	5 17.2 10.6	29 11.8
CALLAO	4	22 59.5 11.1	15 40.5 31.9	37 15.1
ICA	5	25 92.6 12.6	2 7.4 4.3	27 11.0
AREQUIPA	6	19 67.9 9.6	9 32.1 19.1	28 11.4
PUNO	7	32 100.0 16.2		32 13.1
ANCASH	8	26 89.7 13.1	3 10.3 6.4	29 11.8
	COLUMN TOTAL	198 80.8	47 19.2	245 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
32.19365	7	0.0000	5.180	NONE

NUMBER OF MISSING OBSERVATIONS = 39

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR049 COMO REUNIR GENTE

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 ICITACION IFS	2 COORDINA C. CON C	3 COORDINA C.CON DI	4 PEGADO D E AFICHE	5 PERSONAL MENTE	6 RADIODIF USORAS	7 ASAMBLEA S ORDINA	8 OTROS	ROW TOTAL
PIURA-TUMBES	1	1 5.0 2.1	3 15.0 14.3	3 15.0 7.0	1 5.0 100.0	2 10.0 5.7	10 50.0 100.0			20 10.0
SAN MARTIN	2	8 25.0 16.7	3 9.4 14.3	12 37.5 27.9		5 15.6 14.3		4 12.5 10.3		32 15.9
HUANUCO-PASCO-UC	3	10 41.7 20.8	2 8.3 9.5	4 16.7 9.3		2 8.3 5.7		6 25.0 15.4		24 11.9
CALLAO	4	6 26.1 12.5	3 13.0 14.3	2 8.7 4.7		5 21.7 14.3		6 26.1 15.4	1 4.3 25.0	23 11.9
ICA	5	10 40.0 20.8	1 4.0 4.8			14 56.0 40.0				25 12.4
AREQUIPA	6	3 15.8 6.3	2 10.5 9.5	8 42.1 18.6		5 26.3 14.3			1 5.3 25.0	19 9.5
PUNO	7	6 18.8 12.5	2 6.3 9.5	4 12.5 9.3		1 3.1 2.9		19 59.4 48.7		32 15.9
ANCASH	8	4 15.4 8.3	5 19.2 23.8	10 38.5 23.3		1 3.8 2.9		4 15.4 10.3	2 7.7 50.0	26 12.9
	COLUMN TOTAL	48 23.9	21 10.4	43 21.4	1 .5	35 17.4	10 5.0	39 19.4	4 2.0	201 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
214.48761	49	0.0000	0.095	48 OF 64 (75.0%)

NUMBER OF MISSING OBSERVATIONS = 83

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F BY VAR050 ULTIMA CHARLA — PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1	2	3	5	6	7	22222	ROW TOTAL
PIURA-TUMBES	1	6 31.6 33.3		4 21.1 12.5	5 26.3 7.7		4 21.1 5.7		19 9.6
SAN MARTIN	2		1 3.2 10.0	5 16.1 15.6	15 48.4 23.1		10 32.3 14.3		31 15.7
HUANUCO-PASCO-UC	3	1 4.3 5.6	1 4.3 10.0	1 4.3 3.1	4 17.4 6.2		16 69.6 22.9		23 11.7
CALLAO	4	2 8.7 11.1	4 17.4 40.0	5 21.7 15.6	2 8.7 3.1		9 39.1 12.9	1 4.3 100.0	23 11.7
ICA	5	2 8.0 11.1		6 24.0 18.8	12 48.0 18.5		5 20.0 7.1		25 12.7
AREQUIPA	6	2 11.1 11.1	1 5.6 10.0	5 27.8 15.6	5 27.8 7.7		5 27.8 7.1		18 9.1
PUNO	7	3 9.4 16.7	2 6.3 20.0	4 12.5 12.5	14 43.8 21.5	1 3.1 100.0	8 25.0 11.4		32 16.2
ANCASH	8	2 7.7 11.1	1 3.8 10.0	2 7.7 6.3	8 30.8 12.3		13 50.0 18.6		26 13.2
	COLUMN TOTAL	18 9.1	10 5.1	32 16.2	65 33.0	1 .5	70 35.5	1 .5	197 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
67.48176	42	0.0076	0.091	38 OF 56 (67.9%)

NUMBER OF MISSING OBSERVATIONS = 87

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR052 LETRINAS

VAR001	COUNT / ROW PCT / COL PCT	VAR052 1	2	3	4	ROW TOTAL
PIURA-TUMBES	1	2 18.2 2.9	1 9.1 4.2	2 18.2 8.7	6 54.5 16.7	11 7.2
SAN MARTIN	2	14 51.9 20.3	3 11.1 12.5	2 7.4 8.7	8 29.6 22.2	27 17.8
HUANUCO-PASCO-UC	3	9 45.0 13.0	5 25.0 20.8	2 10.0 8.7	4 20.0 11.1	20 13.2
CALLAO	4	8 66.7 11.6	1 8.3 4.2		3 25.0 8.3	12 7.9
ICA	5	2 10.5 2.9	4 21.1 16.7	4 21.1 17.4	9 47.4 25.0	19 12.5
AREQUIPA	6	5 38.5 7.2	2 15.4 8.3	4 30.8 17.4	2 15.4 5.6	13 8.6
PUNO	7	9 33.3 13.0	6 22.2 25.0	9 33.3 39.1	3 11.1 8.3	27 17.8
ANCASH	8	20 87.0 29.0	2 8.7 8.3		1 4.3 2.8	23 15.1
	COLUMN TOTAL	69 45.4	24 15.8	23 15.1	36 23.7	152 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
52.53237	21	0.0002	1.664	22 OF 32 (68.8%)

NUMBER OF MISSING OBSERVATIONS = 132

454

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR053 INSTALACION CON AYUDA

VAR001	COUNT / ROW PCT / COL PCT	VAR053 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	15 68.2 20.3	1 4.5 1.7	2 9.1 22.2	1 4.5 6.7	3 13.6 33.3	22 13.3
SAN MARTIN	2	18 52.9 24.3	7 20.6 12.1	3 8.8 33.3	2 5.9 13.3	4 11.8 44.4	34 20.6
HUANUCO-PASCO-UC	3	3 20.0 4.1	11 73.3 19.0	1 6.7 11.1			15 9.1
CALLAO	4	8 72.7 10.8	3 27.3 5.2				11 6.7
ICA	5	9 40.9 12.2	8 36.4 13.8	1 4.5 11.1	4 18.2 26.7		22 13.3
AREQUIPA	6	17 70.8 23.0	5 20.8 8.6	1 4.2 11.1	1 4.2 6.7		24 14.5
PUNO	7	2 7.7 2.7	14 53.8 24.1	1 3.8 11.1	7 26.9 46.7	2 7.7 22.2	26 15.8
ANCASH	8	2 18.2 2.7	9 81.8 15.5				11 6.7
	COLUMN TOTAL	74 44.8	58 35.2	9 5.5	15 9.1	9 5.5	165 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
74.35605	28	0.0000	0.600	28 OF 40 (70.0%)

NUMBER OF MISSING OBSERVATIONS = 119

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR054 RAZON NO-INSTALACION

VAR001	COUNT / ROW PCT / COL PCT	VAR054: NO OPORTUN. FALT 1	ESTABAN INSTALAD 2	HAY DESAGUE 3	LA GENTE NO QUIE 4	FALTA DE CULT.-A 5	NO ES ADOC.EL TE 7	PROB.CLIMAT. Y O 8	ROW TOTAL
PIURA-TUMBES	1	3 15.8 7.7			6 31.6 26.1	7 36.8 25.0	1 5.3 100.0	2 10.5 9.1	19 14.6
SAN MARTIN	2	6 35.3 15.4	1 5.9 10.0		5 29.4 21.7	3 17.6 10.7		2 11.8 9.1	17 13.1
HUANUCO-PASCO-UC	3	1 7.7 2.6	1 7.7 10.0		1 7.7 4.3	3 23.1 10.7		7 53.8 31.8	13 10.0
CALLAO	4	10 38.5 25.6	1 3.8 10.0	6 23.1 85.7	3 11.5 13.0	4 15.4 14.3		2 7.7 9.1	26 20.0
ICA	5	5 35.7 12.8	6 42.9 60.0	1 7.1 14.3	1 7.1 4.3	1 7.1 3.6			14 10.8
AREQUIPA	6	5 33.3 12.8	1 6.7 10.0		4 26.7 17.4	5 33.3 17.9			15 11.5
PUNO	7	3 42.9 7.7			1 14.3 4.3	1 14.3 3.6		2 28.6 9.1	7 5.4
ANCASH	8	6 31.6 15.4			2 10.5 8.7	4 21.1 14.3		7 36.8 31.8	19 14.6
	COLUMN TOTAL	39 30.0	10 7.7	7 5.4	23 17.7	28 21.5	1 .8	22 16.9	130 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
91.68771	42	0.0000	0.054	51 OF 56 (91.1%)

NUMBER OF MISSING OBSERVATIONS = 154

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR055 AGUA-CASA

VAR001	COUNT / ROW PCT / COL PCT	VAR055 1 POZO	2 RIO	3 PILAS	4 MANATIAL	5 ACEQUIAS	6 MOTOR - POTABLE	7 OTRO	ROW TOTAL
PIURA-TUMBES	1	13 50.0 20.6	7 26.9 20.0	1 3.8 1.9	2 7.7 3.7	3 11.5 12.0			26 10.8
SAN MARTIN	2	15 42.9 23.8	5 14.3 14.3		13 37.1 24.1	2 5.7 8.0			35 14.5
HUANUCO-PASCO-UC	3	6 20.7 9.5	14 48.3 40.0	1 3.4 1.9	7 24.1 13.0			1 3.4 10.0	29 12.0
CALLAO	4	2 5.4 3.2	3 8.1 8.6	16 43.2 30.2	6 16.2 11.1	2 5.4 8.0		8 21.6 80.0	37 15.4
ICA	5	9 33.3 14.3	1 3.7 2.9	15 55.6 28.3			1 3.7 100.0	1 3.7 10.0	27 11.2
AREQUIPA	6	4 15.4 6.3		10 38.5 18.9	8 30.8 14.8	4 15.4 16.0			26 10.8
PUNO	7	13 40.6 20.6	5 15.6 14.3	2 6.3 3.8	10 31.3 18.5	2 6.3 8.0			32 13.3
ANCASH	8	1 3.4 1.6		8 27.6 15.1	8 27.6 14.8	12 41.4 48.0			29 12.0
	COLUMN TOTAL	63 26.1	35 14.5	53 22.0	54 22.4	25 10.4	1 .4	10 4.1	241 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
199.02892	42	0.0000	0.108	30 OF 56 (53.6%)

NUMBER OF MISSING OBSERVATIONS = 43

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR056 AYUDA INSTALACION-AGUA

VAR001 \ VAR056 (COUNT / ROW PCT / COL PCT)	SI (1)	NO (2)	. (8)	ROW TOTAL
1 PIURA-TUMBES	7 31.8 11.9	15 68.2 9.9		22 10.4
2 S/M MARTIN		26 96.3 17.1	1 3.7 100.0	27 12.7
3 HUANUCO-PASCO-UC		18 100.0 11.9		18 8.5
4 CALLAO	12 34.3 20.3	23 65.7 15.1		35 16.5
5 ICA	7 26.9 11.9	19 73.1 12.5		26 12.3
6 AREQUIPA	7 26.9 11.9	19 73.1 12.5		26 12.3
7 PUNO	17 54.8 28.8	14 45.2 9.2		31 14.6
8 ANCASH	9 33.3 15.3	18 66.7 11.8		27 12.7
COLUMN TOTAL	59 27.8	152 71.7	1 .5	212 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
36.11598	14	0.0010	0.085	8 OF 24 (33.3%)

NUMBER OF MISSING OBSERVATIONS = 72

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR057 FORMA AYUDA-AGUA

VAR001	COUNT / ROW PCT / COL PCT	VAR057: 1 ENSEÑANDO A IMPORT	2 MANO DE OBRA	3 FORMANDO COMISIO	4 HACIENDO GESTION	5 TRABAJAN D.CON CO	6 CONSIG. C CONTRI	8 NO HE TENIDO OPO	ROW TOTAL
PIURA-TUMBES	1		1 7.7 4.5	1 7.7 16.7	1 7.7 12.5	6 46.2 60.0		4 30.8 100.0	13 20.0
CALLAO	4	1 8.3 8.3	5 41.7 22.7	1 8.3 16.7	1 8.3 12.5	2 16.7 20.0	2 16.7 66.7		12 18.5
ICA	5		2 33.3 9.1	1 16.7 16.7		2 33.3 20.0	1 16.7 33.3		6 9.2
AREQUIPA	6	1 12.5 8.3	4 50.0 18.2	3 37.5 50.0					8 12.3
PUNO	7	10 58.8 83.3	4 23.5 18.2		3 17.6 37.5				17 26.2
ANCASH	8		6 66.7 27.3		3 33.3 37.5				9 13.8
	COLUMN TOTAL	12 18.5	22 33.8	6 9.2	8 12.3	10 15.4	3 4.6	4 6.2	65 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
81.64255	30	0.0000	0.277	41 OF 42 (97.6%)

NUMBER OF MISSING OBSERVATIONS = 219

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR079 VACUNA-MADRES GESTANTES

VAR001	COUNT / ROW PCT / COL PCT	VAR079 NO SABE (1)	ANTITETANICA (2)	TRIPLE (4)	BCG (5)	POLIO (6)	NO APLIC AMLE (9)	TBC (10)	ROW TOTAL
PIURA-TUMBES	1	6 21.4 5.5	20 71.4 17.5	1 3.6 100.0	1 3.6 16.7				28 12.0
SAN MARTIN	2	16 55.2 14.7	11 37.9 9.6		1 3.4 16.7	1 3.4 100.0			29 12.4
HUANUCO-PASCO-UC	3	9 33.3 8.3	16 59.3 14.0		2 7.4 33.3				27 11.5
CALLAO	4	16 43.2 14.7	18 48.6 15.8		1 2.7 16.7		1 2.7 100.0	1 2.7 50.0	37 15.8
ICA	5	4 14.8 3.7	22 81.5 19.3					1 3.7 50.0	27 11.5
AREQUIPA	6	13 50.0 11.9	13 50.0 11.4						26 11.1
PUNO	7	26 83.9 23.9	4 12.9 3.5		1 3.2 16.7				31 13.2
ANCASH	8	19 65.5 17.4	10 34.5 8.8						29 12.4
	COLUMN TOTAL	109 46.6	114 48.7	1 .4	6 2.6	1 .4	1 .4	2 .9	234 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
72.44142	42	0.0024	0.111	40 OF 56 (71.4%)

NUMBER OF MISSING OBSERVATIONS = 50

VAR001 REGION DE SALUD — CROSSTABULATION OF — BY VAR144 ACTIVIDAD MAS IMPORTANTE

VAR001	COUNT / ROW PCT / COL PCT	VAR144 HUERTOS FAMILIAR 1	REUNIONES COMUNA 2	EXCRETAS Y BASUR 3	PRIMEROS AUXILIO 4	CONTROL EMBARAZA 5	INYECTABLES 7	NINOS-DIARREA 8	CHARLAS EDUCATIV 10	GESTANTES-NUTRIC 11	REFERIR TBC 12	ROW TOTAL
PIURA-TUMBES	1			1 3.6 9.1	6 21.4 8.3	2 7.1 20.0		3 10.7 23.1	2 7.1 14.3	1 3.6 25.0	5 17.9 23.8	28 11.6
SAN MARTIN	2	7 20.0 87.5		4 11.4 36.4	12 34.3 16.7	1 2.9 10.0	2 5.7 40.0	2 5.7 15.4		1 2.9 25.0	1 2.9 4.8	35 14.5
HUANUCO-PASCO-UC	3			1 3.6 9.1	16 57.1 22.2			1 3.6 7.7	3 10.7 21.4			28 11.6
CALLAO	4				12 32.4 16.7	2 5.4 20.0	3 8.1 60.0	3 8.1 23.1	3 8.1 21.4		2 5.4 9.5	37 15.4
ICA	5				3 11.1 4.2	1 3.7 10.0		3 11.1 23.1		1 3.7 25.0	2 7.4 9.5	27 11.2
AREQUIPA	6		2 8.0 100.0	2 8.0 18.2	10 40.0 13.9	3 12.0 30.0					3 12.0 14.3	25 10.4
PUNO	7	1 3.1 12.5				1 3.1 10.0		1 3.1 7.7	2 6.3 14.3	1 3.1 25.0	8 25.0 38.1	32 13.3
ANCASH	8			3 10.3 27.3	13 44.8 18.1				4 13.8 28.6			29 12.0
(CONTINUED)	COLUMN TOTAL	8 3.3	2 .8	11 4.6	72 29.9	10 4.1	5 2.1	13 5.4	14 5.8	4 1.7	21 8.7	241 100.0

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR144 ACTIVIDAD MAS IMPORTANTE

VAR001	COUNT / ROW PCT / COL PCT	VAR144 VACUNACIONES (1)	RALIA (5)	LACTANCIA-PRIM.C (6)	PLANIFICACION FA (7)	TODAS (8)	SALUD MATERNO-IN (9)	OTROS (21)	ROW TOTAL
PIURA-TUMBES	1	5 17.9 27.8			2 7.1 4.7	1 3.6 11.1			28 11.6
SAN MARTIN	2	2 5.7 11.1				3 8.6 33.3			35 14.5
HUANUCO-PASCO-UC	3	3 10.7 16.7			3 10.7 7.0			1 3.6 50.0	28 11.6
CALLAO	4				8 21.6 18.6	4 10.8 44.4			37 15.4
ICA	5	1 3.7 5.6			12 44.4 27.9		4 14.8 66.7		27 11.2
AREQUIPA	6		1 4.0 50.0		4 16.0 9.3				25 10.4
PUNO	7	6 18.8 33.3		1 3.1 100.0	10 31.3 23.3	1 3.1 11.1			32 13.3
ANCASH	8	1 3.4 5.6	1 3.4 50.0		4 13.8 9.3		2 6.9 33.3	1 3.4 50.0	29 12.0
	COLUMN TOTAL	18 7.5	2 .8	1 .4	43 17.8	9 3.7	6 2.5	2 .8	241 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
240.46889	112	0.0000	0.104	124 OF 136 (91.2%)

NUMBER OF MISSING OBSERVATIONS = 43

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR145 AMPLIACION-CAPACITACION

PAGE 1 OF 3

VAR001	COUNT / ROW PCT / COL PCT	VAR145 HUERTOS FAMILIAR (1)	REUNIONES COMUNA (2)	EXCRETAS Y BASUR (3)	PRIM AUX (4)	CONTROL EMBARAZA (5)	INYECTABLES (7)	NINOS-DIARREA (8)	CHARLAS EDUCATIV (10)	GESTANTES NUTRIC (11)	TBC (12)	ROW TOTAL
PIURA-TUMBES	1	1 3.8 25.0	2 7.7 66.7	.	4 15.4 10.5	3 11.5 17.6		2 7.7 50.0	2 7.7 33.3			26 11.0
SAN MARTIN	2	3 9.7 75.0			8 25.8 21.1	1 3.2 5.9	2 6.5 12.5			1 3.2 25.0	1 3.2 14.3	31 13.1
HUANUCO-PASCO-UC	3			3 10.7 42.9	7 25.0 18.4	4 14.3 23.5	1 3.6 6.3				1 3.6 14.3	28 11.9
CALLAO	4				10 27.0 26.3	2 5.4 11.8	4 10.8 25.0		1 2.7 16.7	1 2.7 25.0		37 15.7
ICA	5				2 7.4 5.3	2 7.4 11.8	2 7.4 12.5		1 3.7 16.7	1 3.7 25.0		27 11.4
AREQUIPA	6				2 8.3 5.3	3 12.5 17.6	2 8.3 12.5				1 4.2 14.3	24 10.2
PUNO	7		1 2.9 33.3	2 5.9 28.6	3 8.8 7.9	2 5.9 11.8	1 2.9 6.3	1 2.9 25.0	1 2.9 16.7		4 11.8 57.1	34 14.4
ANCASH	8			2 6.9 28.6	2 6.9 5.3		4 13.8 25.0	1 3.4 25.0	1 3.4 16.7	1 3.4 25.0		29 12.3
(CONTINUED)	COLUMN TOTAL	4 1.7	3 1.3	7 3.0	38 16.1	17 7.2	16 6.8	4 1.7	6 2.5	4 1.7	7 3.0	236 100.0

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR145 AMPLIACION-CAPACITACION

VAR001	COUNT / ROW PCT / COL PCT	VAR145 VACUNACIONES 13	GOTA GRU ESA 14	RABIA 15	PLANIFICACION FA 17	SALUD MA DRE-NINO 18	CHAPLAS 19	MAS CAPACITACION 20	MANEJAR MEDICAME 21	ENFERM.R ESPIRATO 22	NUTRICION 23	ROW TOTAL
PIURA-TUMBES	1	2 7.7 7.7			3 11.5 8.6	2 7.7 12.5	2 7.7 40.0	2 7.7 11.8				26 11.0
SAN MARTIN	2	3 9.7 11.5		1 3.2 100.0	2 6.5 5.7	1 3.2 6.3		4 12.9 23.5	3 9.7 16.7			31 13.1
HUANUCO-PASCO-UC	3	2 7.1 7.7			3 10.7 8.6	2 7.1 12.5			4 14.3 22.2			28 11.9
CALLAO	4	4 10.8 15.4			9 24.3 25.7	2 5.4 12.5		1 2.7 5.9	2 5.4 11.1			37 15.7
ICA	5	3 11.1 11.5			8 29.6 22.9	7 25.9 43.8		1 3.7 5.9				27 11.4
AREQUIPA	6	5 20.8 19.2			3 12.5 8.6	1 4.2 6.3	3 12.5 60.0	3 12.5 17.6	1 4.2 5.6			24 10.2
PUNO	7	2 5.9 7.7	1 2.9 100.0		3 8.8 8.6	1 2.9 6.3		6 17.6 35.3	4 11.8 22.2	1 2.9 100.0	1 2.9 50.0	34 14.4
ANCASH	8	5 17.2 19.2			4 13.8 11.4				4 13.8 22.2		1 3.4 50.0	29 12.3
(CONTINUED)	COLUMN TOTAL	26 11.0	1 .4	1 .4	35 14.8	16 6.8	5 2.1	17 7.2	18 7.6	1 .4	2 .8	236 100.0

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR145 AMPLIACION-CAPACITACION

VAR001	COUNT / ROW PCT / COL PCT	VAR145 OTROS TRANS.CRON 24	ROW TOTAL
PIURA-TUMBES	1	1 3.8 12.5	26 11.0
SAN MARTIN	2	1 3.2 12.5	31 13.1
HUANUCO-PASCO-UC	3	1 3.6 12.5	28 11.9
CALLAO	4	1 2.7 12.5	37 15.7
ICA	5		27 11.4
AREQUIPA	6		24 10.2
PUNO	7		34 14.4
ANCASH	8	4 13.8 50.0	29 12.3
	COLUMN TOTAL	8 3.4	236 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
202.84811	140	0.0004	0.102	164 OF 168 (97.6%)

NUMBER OF MISSING OBSERVATIONS = 48

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR217 PACIENTES CON TBC

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR217: 11	21	31	777 NO TIENE PACIENTE	888 NO HAY T 9C	900	ROW TOTAL
PIURA-TUMBES	1	4 14.8 9.5	5 18.5 11.6	2 7.4 14.3	15 55.6 11.0	1 3.7 33.3		27 11.3
SAN MARTIN	2	10 29.4 23.8	2 5.9 4.7	1 2.9 7.1	21 61.8 15.4			34 14.2
HUANUCO-PASCO-UC	3	8 27.6 19.0	3 10.3 7.0		18 62.1 13.2			29 12.1
CALLAO	4	2 5.7 4.8	9 25.7 20.9	3 8.6 21.4	19 54.3 14.0	1 2.9 33.3	1 2.9 100.0	35 14.6
ICA	5	3 11.1 7.1	6 22.2 14.0	2 7.4 14.3	15 55.6 11.0	1 3.7 33.3		27 11.3
AREQUIPA	6	3 12.0 7.1	7 28.0 16.3	3 12.0 21.4	12 48.0 8.8			25 10.5
PUNO	7	8 24.2 19.0	9 27.3 20.9	3 9.1 21.4	13 39.4 9.6			33 13.8
ANCASH	8	4 13.8 9.5	2 6.9 4.7		23 79.3 16.9			29 12.1
	COLUMN TOTAL	42 17.6	43 18.0	14 5.9	136 56.9	3 1.3	1 .4	239 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
42.32018	35	0.1843	0.105	30 OF 48 (62.5%)

NUMBER OF MISSING OBSERVATIONS = 45

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR218 TRANSFERENCIAS

VAR001	COUNT / ROW PCT / COL PCT	VAR218 SI (1)	VAR218 NO (2)	VAR218 (7)	ROW TOTAL
PIURA-TUMBES	1	23 82.1 13.1	5 17.9 7.8		28 11.6
SAN MARTIN	2	17 51.5 9.7	16 48.5 25.0		33 13.7
HUANUCO-PASCO-UC	3	25 86.2 14.3	4 13.8 6.3		29 12.0
CALLAO	4	17 48.6 9.7	16 45.7 25.0	2 5.7 100.0	35 14.5
ICA	5	24 88.9 13.7	3 11.1 4.7		27 11.2
AREQUIPA	6	13 50.0 7.4	13 50.0 20.3		26 10.8
PUNO	7	33 97.1 18.9	1 2.9 1.6		34 14.1
ANCASH	8	23 79.3 13.1	6 20.7 9.4		29 12.0
	COLUMN TOTAL	175 72.6	64 26.6	2 .8	241 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
52.17344	14	0.0000	0.216	8 OF 24 (33.3%)

NUMBER OF MISSING OBSERVATIONS = 43

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR219 TRANSFEREN.-ULTIMO MES: CENTRO SALUD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR219 1	2	3	NINGUNO 88	ROW TOTAL
PIURA-TUMBES	1	8 36.4 13.1	2 9.1 28.6	2 9.1 50.0	10 45.5 9.7	22 12.6
SAN MARTIN	2	6 31.6 9.8	1 5.3 14.3		12 63.2 11.7	19 10.9
HUANUCO-PASCO-UC	3	6 24.0 9.8		1 4.0 25.0	18 72.0 17.5	25 14.3
CALLAO	4	8 44.4 13.1		1 5.6 25.0	9 50.0 8.7	18 10.3
ICA	5	6 25.0 9.8			18 75.0 17.5	24 13.7
AREQUIPA	6	9 75.0 14.8	2 16.7 28.6		1 8.3 1.0	12 6.9
PUNO	7	15 46.9 24.6	1 3.1 14.3		16 50.0 15.5	32 18.3
ANCASH	8	3 13.0 4.9	1 4.3 14.3		19 82.6 18.4	23 13.1
	COLUMN TOTAL	61 34.9	7 4.0	4 2.3	103 58.9	175 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
39.87594	21	0.0077	0.274	17 OF 32 (53.1%)

NUMBER OF MISSING OBSERVATIONS = 109

VARC01 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR220 TRANSFEREN.-ULTIMO MES: POSTA SANITARIA

VARC01	COUNT / ROW PCT / COL PCT	VAR220 1	2	3	NINGUNO 88	ROW TOTAL
PIURA-TUMBES	1	5 25.0 10.2			15 75.0 13.2	20 11.8
SAN MARTIN	2	4 21.1 8.2	1 5.3 50.0		14 73.7 12.3	19 11.2
HUANUCO-PASCO-UC	3	6 24.0 12.2	1 4.0 50.0		18 72.0 15.8	25 14.8
CALLAO	4	1 5.9 2.0		1 5.9 25.0	15 88.2 13.2	17 10.1
ICA	5	6 25.0 12.2			18 75.0 15.8	24 14.2
AREQUIPA	6	2 25.0 4.1			6 75.0 5.3	8 4.7
PUNO	7	21 63.6 42.9		2 6.1 50.0	10 30.3 8.8	33 19.5
ANCASH	8	4 17.4 8.2		1 4.3 25.0	18 78.3 15.8	23 13.6
	COLUMN TOTAL	49 29.0	2 1.2	4 2.4	114 67.5	169 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
18.90752	21	0.0101	0.095	18 OF 32 (56.3%)

NUMBER OF MISSING OBSERVATIONS = 115

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR221 TRANSFEREN.-ULTIMO MES: HOSPITAL LOCAL

VAR001	COUNT / ROW PCT / COL PCT	VAR221: 1	2	3	NINGUNO 88	ROW TOTAL
PIURA-TUMBES	1	1 5.3 2.9		4 21.1 57.1	14 73.7 11.7	19 11.6
SAN MARTIN	2	3 15.8 8.8	1 5.3 33.3		15 78.9 12.5	19 11.6
HUANUCO-PASCO-UC	3	10 40.0 29.4			15 60.0 12.5	25 15.2
CALLAO	4	2 11.1 5.9			16 88.9 13.3	18 11.0
ICA	5	7 29.2 20.6	2 8.3 66.7	3 12.5 42.9	12 50.0 10.0	24 14.6
AREQUIPA	6	1 14.3 2.9			6 85.7 5.0	7 4.3
PUNO	7	6 20.7 17.6			23 79.3 19.2	29 17.7
ANCASH	8	4 17.4 11.8			19 82.6 15.8	23 14.0
	COLUMN TOTAL	34 20.7	3 1.8	7 4.3	120 73.2	164 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
42.91716	21	0.0032	0.128	22 OF 32 (68.8%)

NUMBER OF MISSING OBSERVATIONS = 120

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR236 TARJETAS DE TRANSFERENCIA

VAR001	COUNT / ROW PCT / COL PCT	VAR236 SI (1)	VAR236 NO (2)	ROW TOTAL
PIURA-TUMBES	1	18	6	24
		75.0	25.0	11.3
		22.5	4.5	
SAN MARTIN	2	6	16	22
		27.3	72.7	10.4
		7.5	12.1	
HUANUCO-PASCO-UC	3	9	18	27
		33.3	66.7	12.7
		11.3	13.6	
CALLAO	4	3	32	35
		8.6	91.4	16.5
		3.8	24.2	
ICA	5	13	13	26
		50.0	50.0	12.3
		16.3	9.8	
AREQUIPA	6	8	13	21
		38.1	61.9	9.9
		10.0	9.8	
PUNO	7	19	10	29
		65.5	34.5	13.7
		23.8	7.6	
ANCASH	8	4	24	28
		14.3	85.7	13.2
		5.0	18.2	
	COLUMN TOTAL	80	132	212
		37.7	62.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
45.84692	7	0.0000	7.925	NONE

NUMBER OF MISSING OBSERVATIONS = 72

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR237 PRIMERA ENFERMEDAD MAS COMUN PAGE 1 OF 3

VAR001	COUNT / ROW PCT / COL PCT	VAR237 MALARIA 1	DESHIDRATACION 2	GRIPE 3	DIARREA 4	NEUMONIA 5	BRONQUITIS 6	INFECCION PIEL 10	TBC 11	HERIDAS 12	REUMATISMO 13	ROW TOTAL
PIURA-TUMBES	1	2 7.7 50.0	1 3.8 33.3	3 11.5 7.3	13 50.0 14.6	1 3.8 16.7	4 3.8 5.9		2 7.7 25.0			26 11.1
SAN MARTIN	2	2 5.7 50.0		11 31.4 26.8	5 14.3 5.6		2 5.7 11.8	1 2.9 100.0	8 2.9 12.5		1 2.9 50.0	35 15.0
HUANUCO-PASCO-UC	3			2 6.9 4.9	13 44.8 14.6	1 3.4 16.7	3 10.3 17.6			2 6.9 100.0		29 12.4
CALLAO	4			9 28.1 22.0	7 21.9 7.9		2 6.3 11.8		2 6.3 25.0			32 13.7
ICA	5		1 3.7 33.3		17 63.0 19.1		3 11.1 17.6					27 11.5
AREQUIPA	6		1 4.0 33.3		15 60.0 16.9		2 8.0 11.8					25 10.7
PUNO	7			8 25.8 19.5	8 25.8 9.0	1 3.2 16.7	3 9.7 17.6		3 9.7 37.5		1 3.2 50.0	31 13.2
ANCASH	8			8 27.6 19.5	11 37.9 12.4	3 10.3 50.0	1 3.4 5.9					29 12.4
(CONTINUED)	COLUMN TOTAL	4 1.7	3 1.3	41 17.5	89 38.0	6 2.6	17 7.3	1 .4	8 3.4	2 .9	2 .9	234 100.0

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR237 PRIMERA ENFERMEDAD MAS COMUN

PAGE 2 OF 3

VAR001	COUNT / ROW PCT / COL PCT	VAR237 GESTANTES (15)	FIEBRE INTESTINAL (16)	FIEBRE (17)	DESNUTRICION (18)	COLICOS (19)	DISENTERIA (21)	ESTOMACAL (22)	RESPIRATORIOS (23)	OJOS (25)	TIFOIDEA (26)	ROW TOTAL
PIURA-TUMBES	1	1 3.8 50.0		1 3.8 5.6	1 3.8 100.0							26 11.1
SAN MARTIN	2			5 14.3 27.8			1 2.9 100.0	2 5.7 40.0		1 2.9 50.0	1 2.9 33.3	35 15.0
HUANUCO-PASCO-UC	3			4 13.8 22.2		1 3.4 9.1		3 10.3 60.0				29 12.4
CALLAO	4		1 3.1 100.0	3 9.4 16.7		1 3.1 9.1			4 12.5 36.4	1 3.1 50.0	1 3.1 33.3	32 13.7
ICA	5			1 3.7 5.6		4 14.8 36.4						27 11.5
AREQUIPA	6			2 8.0 11.1		2 8.0 18.2			1 4.0 9.1		1 4.0 33.3	25 10.7
PUNO	7	1 3.2 50.0		2 6.5 11.1					4 12.9 36.4			31 13.2
ANCASH	8					3 10.3 27.3			2 6.9 18.2			29 12.4
(CONTINUED)	COLUMN TOTAL	2 .9	1 .4	18 7.7	1 .4	11 4.7	1 .4	5 2.1	11 4.7	2 .9	3 1.3	234 100.0

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR237 PRIMERA ENFERMEDAD MAS COMUN

VAR001	COUNT / ROW PCT / COL PCT	VAR237 VARICELA PRIM. AU OTROS X. 27	29	30	ROW TOTAL
PIURA-TUMBES	1				26 11.1
SAN MARTIN	2		2 5.7 100.0		35 15.0
HUANUCO-PASCO-UC	3				29 12.4
CALLAO	4			1 3.1 33.3	32 13.7
ICA	5	1 3.7 100.0			27 11.5
AREQUIPA	6			1 4.0 33.3	25 10.7
PUNO	7				31 13.2
ANCASH	8			1 3.4 33.3	29 12.4
	COLUMN TOTAL	1 .4	2 .9	3 1.3	234 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
211.94957	154	0.0014	0.107	171 OF 184 (92.9%)

NUMBER OF MISSING OBSERVATIONS = 50

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR239 SEGUNDA ENFERMEDAD MAS COMUN

VAR001	COUNT / ROW PCT / COL PCT	VAR239 MALARIA 1	DESHIDRATACION 2	GRIPE 3	DIARREA 4	NEUMONIA 5	BRONQUITIS 6	INFECCION PIEL 10	TBC 11	HERIDAS 12	REUMATISMO 13	ROW TOTAL
PIURA-TUMBES	1	4 14.8 57.1	2 7.4 100.0	4 14.8 12.1	4 14.8 8.0		4 14.8 16.0		1 3.7 50.0	1 3.7 12.5		27 11.7
SAN MARTIN	2	3 9.4 42.9		6 18.8 18.2	8 25.0 16.0		1 3.1 4.0			1 3.1 12.5	3 9.4 42.9	32 13.9
HUANUCO-PASCO-UC	3			2 6.9 6.1	9 31.0 18.0		6 20.7 24.0			1 3.4 12.5	1 3.4 14.3	29 12.6
CALLAO	4			3 9.7 9.1	6 19.4 12.0					1 3.2 12.5		31 13.5
ICA	5			6 22.2 18.2	5 18.5 10.0		2 7.4 8.0			2 7.4 25.0	2 7.4 28.6	27 11.7
AREQUIPA	6			8 30.8 24.2	4 15.4 8.0		7 26.9 28.0	2 7.7 100.0		2 7.7 25.0		26 11.3
PUNO	7				11 37.9 22.0		1 3.4 4.0		1 3.4 50.0		1 3.4 14.3	29 12.6
ANCASH	8			4 13.8 12.1	3 10.3 6.0	4 13.8 100.0	4 13.8 16.0					29 12.6
(CONTINUED)	COLUMN TOTAL	7 3.0	2 .9	33 14.3	50 21.7	4 1.7	25 10.9	2 .9	2 .9	8 3.5	7 3.0	230 100.0

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR239 SEGUNDA ENFERMEDAD MAS COMUN
PAGE 2 OF 3

VAR001	COUNT / ROW PCT / COL PCT	VAR239 SARAMPION (14)	GESTANTES (15)	FIEBRE INTESTINAL (16)	FIEBRE (17)	DESNUTRICION (18)	COLICOS (19)	TOSFERINA (21)	ESTOMACAL (22)	RESPIRATORIOS (23)	OJOS (25)	ROW TOTAL
PIURA-TUMBES	1	2 7.4 16.7			4 14.8 21.1					1 3.7 6.7		27 11.7
SAN MARTIN	2	1 3.1 8.3			4 12.5 21.1	1 3.1 33.3	2 6.3 16.7					32 13.9
HUANUCO-PASCO-UC	3				6 20.7 31.6		1 3.4 8.3			1 3.4 6.7		29 12.6
CALLAO	4	3 9.7 25.0			2 6.5 10.5	2 6.5 66.7	2 6.5 16.7	1 3.2 100.0		4 12.9 26.7	4 12.9 66.7	31 13.5
ICA	5	2 7.4 16.7	1 3.7 50.0		1 3.7 5.3		1 3.7 8.3			1 3.7 6.7	2 7.4 33.3	27 11.7
AREQUIPA	6	1 3.8 8.3		1 3.8 100.0			1 3.8 8.3					26 11.3
PUNO	7	1 3.4 8.3	1 3.4 50.0		2 6.9 10.5				3 10.3 50.0	7 24.1 46.7		29 12.6
ANCASH	8	2 6.9 16.7					5 17.2 41.7		3 10.3 50.0	1 3.4 6.7		29 12.6
(CONTINUED)	COLUMN TOTAL	12 5.2	2 .9	1 .4	19 8.3	3 1.3	12 5.2	1 .4	6 2.6	15 6.5	6 2.6	230 100.0

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR239 SEGUNDA ENFERMEDAD MAS COMUN

VAR001	COUNT / ROW PCT / COL PCT	VAR239 TIFOIDEA 26	VARICELA 27	MORDEDUR PRIM. AS PERRO X. 28	AU OTROS 29	30	ROW TOTAL
PIURA-TUMBES	1						27 11.7
SAN MARTIN	2					2 6.3 25.0	32 13.9
HUANUCO-PASCO-UC	3					2 6.9 25.0	29 12.6
CALLAO	4		1 3.2 100.0			2 6.5 25.0	31 13.5
ICA	5	1 3.7 50.0		1 3.7 100.0			27 11.7
AREQUIPA	6						26 11.3
PUNO	7				1 3.4 100.0		29 12.6
ANCASH	8	1 3.4 50.0				2 6.9 25.0	29 12.6
	COLUMN TOTAL	2 .9	1 .4	1 .4	1 .4	8 3.5	230 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
287.35776	168	0.0000	0.113	192 OF 200 (96.0%)

NUMBER OF MISSING OBSERVATIONS = 54

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR241 TERCERA ENFERMEDAD MAS COMUN

VAR001	COUNT / ROW PCT / COL PCT	VAR241 1 MALARIA	2 DESHIDRATACION	3 GRIPE	4 DIARREA	5 NEUMONIA	6 BRONQUITIS	7 PARASITOS	8 ULCERAS	10 INFECCION PIEL	11 TBC	ROW TOTAL
PIURA-TUMBES	1	4 12.5 66.7		4 12.5 14.3	3 9.4 11.1		1 3.1 9.1	1 3.1 33.3		5 15.6 41.7		32 11.9
SAN MARTIN	2	2 6.3 33.3	1 3.1 33.3	4 12.5 14.3	3 9.4 11.1		1 3.1 9.1					32 11.9
HUANUCO-PASCO-UC	3			1 2.9 3.6	1 2.9 3.7	2 5.7 66.7	2 5.7 18.2	2 5.7 66.7		1 2.9 8.3		35 13.0
CALLAO	4		1 2.9 33.3	3 8.6 10.7	8 22.9 29.6					1 2.9 8.3		35 13.0
ICA	5			5 13.9 17.9	2 5.6 7.4		3 8.3 27.3			2 5.6 16.7	1 2.8 33.3	36 13.3
AREQUIPA	6			4 14.3 14.3	2 7.1 7.4		1 3.6 9.1			1 3.6 8.3		28 10.4
PUNO	7		1 2.4 33.3	4 9.5 14.3	3 7.1 11.1		1 2.4 9.1			2 4.8 16.7	2 4.8 66.7	42 15.6
ANCASH	8			3 10.0 10.7	5 16.7 18.5	1 3.3 33.3	2 6.7 18.2		1 3.3 100.0			30 11.1
(CONTINUED)	COLUMN TOTAL	6 2.2	3 1.1	28 10.4	27 10.0	3 1.1	11 4.1	3 1.1	1 .4	12 4.4	3 1.1	270 100.0

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR241 TERCERA ENFERMEDAD MAS COMUN

VAR001	COUNT / ROW PCT / COL PCT	VAR241 HERIDAS 12	REUMATISMO 13	SARAMPION 14	GESTANTES 15	FIEBRE INTESTINAL 16	FIEBRE 17	DESNUTRICION 18	COLICOS 19	TOSFERINA 21	ESTOMACAL 22	ROW TOTAL
PIURA-TUMBES	1	2 6.3 28.6	1 3.1 16.7	2 6.3 33.3		1 3.1 100.0	2 6.3 16.7			1 3.1 25.0		32 11.9
SAN MARTIN	2	2 6.3 28.6	1 3.1 16.7	1 3.1 16.7			3 9.4 25.0	1 3.1 25.0	3 9.4 13.6	2 6.3 50.0	2 6.3 28.6	32 11.9
HUANUCO-PASCO-UC	3						3 8.6 25.0	2 5.7 50.0	7 20.0 31.8		1 2.9 14.3	35 13.0
CALLAO	4	1 2.9 14.3	1 2.9 16.7	1 2.9 16.7					2 5.7 9.1		1 2.9 14.3	35 13.0
ICA	5	1 2.8 14.3		1 2.8 16.7			2 5.6 16.7		4 11.1 18.2		1 2.8 14.3	36 13.3
AREQUIPA	6	1 3.6 14.3							1 3.6 4.5	1 3.6 25.0		28 10.4
PUNO	7		2 4.8 33.3		1 2.4 100.0		2 4.8 16.7		2 4.8 9.1		1 2.4 14.3	42 15.6
ANCASH	8		1 3.3 16.7	1 3.3 16.7				1 3.3 25.0	3 10.0 13.6		1 3.3 14.3	30 11.1
(CONTINUED)	COLUMN TOTAL	7 2.6	6 2.2	6 2.2	1 .4	1 .4	12 4.4	4 1.5	22 8.1	4 1.5	7 2.6	270 100.0

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR241 TERCERA ENFERMEDAD MAS COMUN
PAGE 3 OF 3

VAR001	COUNT / ROW PCT / COL PCT	VAR241 RESPIRATORIOS 23	PICADURAS 24	OJOS 25	TIFODEA 26	PRIM. AUX. 29	OTROS 30	HEPATITIS 31	PARTOS 32	40	NO APLICABLE 99	ROW TOTAL
PIURA-TUMBES	1										5 15.6 7.9	32 11.9
SAN MARTIN	2	1 3.1 8.3			1 3.1 33.3	1 3.1 11.1	1 3.1 12.5			1 3.1 50.0	1 3.1 1.6	32 11.9
HUANUCO-PASCO-UC	3	3 8.6 25.0					1 2.9 12.5				9 25.7 14.3	35 13.0
CALLAO	4	1 2.9 8.3		1 2.9 100.0							14 40.0 22.2	35 13.0
ICA	5	3 8.3 25.0	1 2.8 100.0		1 2.8 33.3						9 25.0 14.3	36 13.3
AREQUIPA	6					5 17.9 55.6			2 7.1 100.0		10 35.7 15.9	28 10.4
PUNO	7	2 4.8 16.7			1 2.4 33.3	3 7.1 33.3	2 4.8 25.0	1 2.4 50.0		1 2.4 50.0	11 26.2 17.5	42 15.6
ANCASH	8	2 6.7 16.7					4 13.3 50.0	1 3.3 50.0			4 13.3 6.3	30 11.1
	COLUMN TOTAL	12 4.4	1 .4	1 .4	3 1.1	9 3.3	8 3.0	2 .7	2 .7	2 .7	63 23.3	270 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
266.07130	203	0.0019	0.104	232 OF 240 (96.7%)

NUMBER OF MISSING OBSERVATIONS = 14

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR243 PARTOS ATENDIDOS - EL AÑO PASADO

VAR001 \ VAR243 (COUNT / ROW PCT / COL PCT)	1	2	3	4	5	6	NINGUNO 8	ROW TOTAL
1 PIURA-TUMBES	2 11.8 8.0				1 5.9 16.7	6 35.3 18.2	8 47.1 12.9	17 11.0
2 SAN MARTIN		3 30.0 20.0	1 10.0 11.1	1 10.0 25.0	1 10.0 16.7	3 30.0 9.1	1 10.0 1.6	10 6.5
3 HUANUCO-PASCO-UC	1 4.0 4.0	2 8.0 13.3	4 16.0 44.4	1 4.0 25.0		2 8.0 6.1	15 60.0 24.2	25 16.2
4 CALLAO	4 21.1 16.0						15 78.9 24.2	19 12.3
5 ICA	2 8.7 8.0	3 13.0 20.0	1 4.3 11.1				17 73.9 27.4	23 14.9
6 AREQUIPA	5 41.7 20.0		1 8.3 11.1			6 50.0 18.2		12 7.8
7 PUNO	2 6.7 8.0	3 10.0 20.0	2 6.7 22.2		4 13.3 66.7	14 46.7 42.4	5 16.7 8.1	30 19.5
8 ANCASH	9 50.0 36.0	4 22.2 26.7		2 11.1 50.0		2 11.1 6.1	1 5.6 1.6	18 11.7
COLUMN TOTAL	25 16.2	15 9.7	9 5.8	4 2.6	6 3.9	33 21.4	62 40.3	154 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
126.40136	42	0.0000	0.260	48 OF 56 (85.7%)

NUMBER OF MISSING OBSERVATIONS = 130

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR246 PIDE INFORMACION-PLANIFICACION FAMILIAR

VAR001	COUNT / ROW PCT / COL PCT	VAR246 1 SI	VAR246 2 NO	ROW TOTAL
PIURA-TUMBES	1	11 40.7 8.5	16 59.3 15.4	27 11.5
SAN MARTIN	2	5 16.7 3.8	25 83.3 24.0	30 12.8
HUANUCO-PASCO-UC	3	17 60.7 13.1	11 39.3 10.6	28 12.0
CALLAO	4	18 50.0 13.8	18 50.0 17.3	36 15.4
ICA	5	25 92.6 19.2	2 7.4 1.9	27 11.5
AREQUIPA	6	14 53.8 10.8	12 46.2 11.5	26 11.1
PUNO	7	25 80.6 19.2	6 19.4 5.8	31 13.2
ANCASH	8	15 51.7 11.5	14 48.3 13.5	29 12.4
	COLUMN TOTAL	130 55.6	104 44.4	234 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
44.63319	7	0.0000	11.556	NONE

NUMBER OF MISSING OBSERVATIONS = 50

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR247 TIPOS MATERIALES- PLAN. FAM.

VAR001	COUNT / ROW PCT / COL PCT	VAR247: 1 CONDONES	2 PILDORAS	4 CONDONES Y PILDO	5 COND. Y TAB. VAG	6 PILD Y T AB. VAGI	7 CONDO.PI LDO.TAB-	8 OTRO	10 NO ENTRE G - NO T	ROW TOTAL
PIURA-TUMBES	1	1 5.3 50.0					1 5.3 16.7	1 5.3 50.0	16 84.2 10.2	19 9.8
SAN MARTIN	2								16 100.0 10.2	16 8.3
HUANUCO-PASCO-UC	3								28 100.0 17.8	28 14.5
CALLAO	4								32 100.0 20.4	32 16.6
ICA	5	1 3.7 50.0	6 22.2 85.7	11 40.7 100.0		4 14.8 100.0	5 18.5 83.3			27 14.0
AREQUIPA	6		1 6.3 14.3					1 6.3 50.0	14 87.5 8.9	16 8.3
PUNO	7				2 7.7 50.0				24 92.3 15.3	26 13.5
ANCASH	8				2 6.9 50.0				27 93.1 17.2	29 15.0
	COLUMN TOTAL	2 1.0	7 3.6	11 5.7	4 2.1	4 2.1	6 3.1	2 1.0	157 81.3	193 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
201.21030	49	0.0000	0.166	56 OF 64 (87.5%)

NUMBER OF MISSING OBSERVATIONS = 91

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR252 COMITE DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR252 SI (1)	VAR252 NO (2)	ROW TOTAL
PIURA-TUMBES	1	28 100.0 13.7		28 11.9
SAN MARTIN	2	26 78.8 12.7	7 21.2 21.9	33 14.0
HUANUCO-PASCO-UC	3	24 85.7 11.8	4 14.3 12.5	28 11.9
CALLAO	4	28 77.8 13.7	8 22.2 25.0	36 15.3
ICA	5	27 100.0 13.2		27 11.4
AREQUIPA	6	23 92.0 11.3	2 8.0 6.3	25 10.6
PUNO	7	22 73.3 10.8	8 26.7 25.0	30 12.7
ANCASH	8	26 89.7 12.7	3 10.3 9.4	29 12.3
	COLUMN TOTAL	204 86.4	32 13.6	236 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
17.90625	7	0.0124	3.390	8 OF 16 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 48

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR253 EXISTENCIA DE COMITE DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR253 SI (1)	VAR253 NO (2)	ROW TOTAL
PIURA-TUMBES	1	23 82.1 15.8	5 17.9 6.0	28 12.2
SAN MARTIN	2	19 57.6 13.0	14 42.4 16.7	33 14.3
HUANUCO-PASCO-UC	3	13 52.0 8.9	12 48.0 14.3	25 10.9
CALLAO	4	11 31.4 7.5	24 68.6 28.6	35 15.2
ICA	5	22 81.5 15.1	5 18.5 6.0	27 11.7
AREQUIPA	6	18 72.0 12.3	7 28.0 8.3	25 10.9
PUNO	7	20 71.4 13.7	8 28.6 9.5	28 12.2
ANCASH	8	20 69.0 13.7	9 31.0 10.7	29 12.6
	COLUMN TOTAL	146 63.5	84 36.5	230 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
27.32939	7	0.0003	9.130	NONE

NUMBER OF MISSING OBSERVATIONS = 54

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR254 TRABAJA CON COMITE DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR254 SI	VAR254 NO	ROW TOTAL
PIURA-TUMBES	1	18 72.0 16.5	7 28.0 14.9	25 16.0
SAN MARTIN	2	15 75.0 13.8	5 25.0 10.6	20 12.8
HUANUCO-PASCO-UC	3	10 76.9 9.2	3 23.1 6.4	13 8.3
CALLAO	4	6 42.9 5.5	8 57.1 17.0	14 9.0
ICA	5	13 56.5 11.9	10 43.5 21.3	23 14.7
AREQUIPA	6	13 68.4 11.9	6 31.6 12.8	19 12.2
PUNO	7	20 90.9 18.3	2 9.1 4.3	22 14.1
ANCASH	8	14 70.0 12.8	6 30.0 12.8	20 12.8
	COLUMN TOTAL	109 69.9	47 30.1	156 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
12.05570	7	0.0987	3.917	2 OF 16 (12.5%)

NUMBER OF MISSING OBSERVATIONS = 128

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR256 COLABORAC. EN ORGANIZ.DEL COMIT.DE SALUD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR256 1 SI	VAR256 2 NO	ROW TOTAL
PIURA-TUMBES	1	20	4	24
		83.3	16.7	15.8
		16.4	13.3	
SAN MARTIN	2	15	3	18
		83.3	16.7	11.8
		12.3	10.0	
HUANUCO-PASCO-UC	3	11	2	13
		84.6	15.4	8.6
		9.0	6.7	
CALLAO	4	7	4	11
		63.6	36.4	7.2
		5.7	13.3	
ICA	5	17	7	24
		70.8	29.2	15.8
		13.9	23.3	
AREQUIPA	6	13	7	20
		65.0	35.0	13.2
		10.7	23.3	
PUNO	7	19	2	21
		90.5	9.5	13.8
		15.6	6.7	
ANCASH	8	20	1	21
		95.2	4.8	13.8
		16.4	3.3	
	COLUMN TOTAL	122	30	152
		80.3	19.7	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
10.96881	7	0.1400	2.171	8 OF 16 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 132

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR266 QUE HACE EL COMITE

VAR001	COUNT / ROW PCT / COL PCT	1 INC HACE INADA	2 CONSTRUI R POSTA	3 CONSEGUI R MEDICI	4 VIGIL.SE RV. DE S	5 SOLIC.AY UD.PARA	6 NO SABE	7 APOYO PR OYECTOS	8	ROW TOTAL
PIURA-TUMBES	1	2 12.5 7.4		1 6.3 33.3		9 56.3 50.0	2 12.5 50.0	1 6.3 10.0	1 6.3 6.3	16 16.5
SAN MARTIN	2	3 18.8 11.1				7 43.8 38.9	1 6.3 25.0	3 18.8 30.0	2 12.5 12.5	16 16.5
HUANUCO-PASCO-UC	3	1 20.0 3.7			4 80.0 25.0					5 5.2
CALLAO	4			1 14.3 33.3	2 28.6 12.5	1 14.3 5.6			3 42.9 18.8	7 7.2
ICA	5	11 78.6 40.7	2 14.3 66.7			1 7.1 5.6				14 14.4
AREQUIPA	6	1 33.3 3.7					1 33.3 25.0	1 33.3 10.0		3 3.1
PUNO	7	3 18.8 11.1	1 6.3 33.3		3 18.8 18.8			3 18.8 30.0	6 37.5 37.5	16 16.5
ANCASH	8	6 30.0 22.2		1 5.0 33.3	7 35.0 43.8			2 10.0 20.0	4 20.0 25.0	20 20.6
	COLUMN TOTAL	27 27.8	3 3.1	3 3.1	16 16.5	18 18.6	4 4.1	10 10.3	16 16.5	97 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
113.48865	49	0.0000	0.093	63 OF 64 (98.4%)

NUMBER OF MISSING OBSERVATIONS = 187

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR267 BOTIQUIN COMUNAL

VAR001	COUNT / ROW PCT / COL PCT	VAR267 1 IMEDICAM. DE LA CO	11 PRESTA P RIM.AUXI	21 BRINDA A POYO	31 FORMANDO POR COM	41 INTERES EN TENER	51 DONDE GU ARDAR ME	61 OTROS	71 NO SABE	81	ROW TOTAL
PIURA-TUMBES	1	15	7	1	1	1		1	2		28
		53.6	25.0	3.6	3.6	3.6		3.6	7.1		11.9
		16.7	12.7	16.7	16.7	100.0		3.7	9.5		
SAN MARTIN	2	7	9	2	2		6	3	4		33
		21.2	27.3	6.1	6.1		18.2	9.1	12.1		14.0
		7.8	16.4	33.3	33.3		20.0	11.1	19.0		
HUANUCO-PASCO-UC	3	9	9		2		4	4	1		29
		31.0	31.0		6.9		13.8	13.8	3.4		12.3
		10.0	16.4		33.3		13.3	14.8	4.8		
CALLAO	4	12	14	1			2	4	2		35
		34.3	40.0	2.9			5.7	11.4	5.7		14.8
		13.3	25.5	16.7			6.7	14.8	9.5		
ICA	5	15	2	1	1		8				27
		55.6	7.4	3.7	3.7		29.6				11.4
		16.7	3.6	16.7	16.7		26.7				
AREQUIPA	6	7	3	1			7	5	2		25
		28.0	12.0	4.0			28.0	20.0	8.0		10.6
		7.8	5.5	16.7			23.3	18.5	9.5		
PUNO	7	12	3				1	6	8		30
		40.0	10.0				3.3	20.0	26.7		12.7
		13.3	5.5				3.3	22.2	38.1		
ANCASH	8	13	8				2	4	2		29
		44.8	27.6				6.9	13.8	6.9		12.3
		14.4	14.5				6.7	14.8	9.5		
	COLUMN TOTAL	90	55	6	6	1	30	27	21		236
		38.1	23.3	2.5	2.5	.4	12.7	11.4	8.9		100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
81.58831	49	0.0024	0.106	48 OF 64 (75.0%)

NUMBER OF MISSING OBSERVATIONS = 48

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR268 EXISTENCIA DE BOTIQUIN COMUNAL

VAR001	COUNT / ROW PCT / COL PCT	VAR268 SI (1)	NO (2)	. (8)	ROW TOTAL
PIURA-TUMBES	1	9 32.1 11.0	19 67.9 11.9		28 11.5
SAN MARTIN	2	16 45.7 19.5	19 54.3 11.9		35 14.5
HUANUCO-PASCO-UC	3	9 31.0 11.0	20 69.0 12.6		29 12.0
CALLAO	4	9 25.0 11.0	26 72.2 16.4	1 2.8 100.0	36 14.9
ICA	5	4 14.8 4.9	23 85.2 14.5		27 11.2
AREQUIPA	6	6 23.1 7.3	20 76.9 12.6		26 10.7
PUNO	7	4 12.5 4.9	28 87.5 17.6		32 13.2
ANCASH	8	25 86.2 30.5	4 13.8 2.5		29 12.0
	COLUMN TOTAL	82 33.9	159 65.7	1 .4	242 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
56.90335	14	0.0000	0.107	8 OF 24 (33.3%)

NUMBER OF MISSING OBSERVATIONS = 42

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR269 RESPONSABILIDAD-BOTIQUIN COMUNAL

VAR001	COUNT / ROW PCT / COL PCT	VAR269 PROMOTOR SANITARI 0 (1)	UN LIDER COMUNIDA 0 (2)	D (4)	centro de salud (5)	OTROS, C OM. SAL. (6)	NO SABE (7)	(8)	ROW TOTAL
PIURA-TUMBES	1	7 70.0 11.9	1 10.0 33.3	1 10.0 50.0				1 10.0 33.3	10 12.0
SAN MARTIN	2	11 73.3 18.6			1 6.7 50.0	3 20.0 23.1			15 18.1
HUANUCO-PASCO-UC	3	7 87.5 11.9				1 12.5 7.7			8 9.6
CALLAO	4	3 30.0 5.1	1 10.0 33.3	1 10.0 100.0	1 10.0 50.0	4 40.0 30.8			10 12.0
ICA	5	4 80.0 6.8						1 20.0 33.3	5 6.0
AREQUIPA	6	3 60.0 5.1			1 20.0 50.0	1 20.0 7.7			5 6.0
PUNO	7	2 40.0 3.4	1 20.0 33.3			1 20.0 7.7	1 20.0 33.3		5 6.0
ANCASH	8	22 88.0 37.3				3 12.0 23.1			25 30.1
	COLUMN TOTAL	59 71.1	3 3.6	1 1.2	2 2.4	2 2.4	13 15.7	3 3.6	83 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
52.78166	42	0.1230	0.060	51 OF 56 (91.1%)

NUMBER OF MISSING OBSERVATIONS = 201

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR272 VISITA-MAS FRECUENTE

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR272 INADIE 1	SANITARIO 2	ENFERMERA DEL CE 3	PERSONAL DEL ARE 4	AUX DE ENFERMERI 5	GENTE DE ORG.EXT 7	OTRA ORGANIZACIO 8	ROW TOTAL
PIURA-TUMBES	1	6 24.0 11.5	10 40.0 9.2	2 8.0 4.9	3 12.0 13.0		3 12.0 100.0	1 4.0 33.3	25 10.6
SAN MARTIN	2	2 5.9 3.8	24 70.6 22.0	3 8.8 7.3	5 14.7 21.7				34 14.4
HUANUCO-PASCO-UC	3	10 35.7 19.2	14 50.0 12.8	3 10.7 7.3	1 3.6 4.3				28 11.9
CALLAO	4	11 30.6 21.2	10 27.8 9.2	10 27.8 24.4	4 11.1 17.4	1 2.8 20.0			36 15.3
ICA	5	4 14.8 7.7	11 40.7 10.1	8 29.6 19.5		4 14.8 80.0			27 11.4
AREQUIPA	6	9 34.6 17.3	4 15.4 3.7	9 34.6 22.0	3 11.5 13.0			1 3.8 33.3	26 11.0
PUNO	7	9 28.1 17.3	17 53.1 15.6	5 15.6 12.2	1 3.1 4.3				32 13.6
ANCASH	8	1 3.6 1.9	19 67.9 17.4	1 3.6 2.4	6 21.4 26.1			1 3.6 33.3	28 11.9
	COLUMN TOTAL	52 22.0	109 46.2	41 17.4	23 9.7	5 2.1	3 1.3	3 1.3	236 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
112.40272	42	0.0000	0.318	37 OF 56 (66.1%)

NUMBER OF MISSING OBSERVATIONS = 48

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR274 ACTIVIDADES DE VISITANTES: PRIMERA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 PREGUNTA IN SOBRE	2 ENSENAN NUEVOS M	3 CRITICAN DURAMEN	4 COPIAN Y RECOGEN	5 ABASTECE N	6 ATIENDEN PACIENT	7 VACUNACI ONES	8 OTROS	ROW TOTAL
PIURA-TUMBES	1	9	4		3		2			18
		50.0	22.2		16.7		11.1			9.6
		6.6	22.2		15.8		66.7			
SAN MARTIN	2	23	3		5	1			1	33
		69.7	9.1		15.2	3.0			3.0	17.6
		16.8	16.7		26.3	50.0			25.0	
HUANUCO-PASCO-UC	3	12	3		1				1	17
		70.6	17.6		5.9				5.9	9.1
		8.8	16.7		5.3				25.0	
CALLAO	4	19	2	1	2		1			25
		76.0	8.0	4.0	8.0		4.0			13.4
		13.9	11.1	100.0	10.5		33.3			
ICA	5	21	1		4					26
		80.8	3.8		15.4					13.9
		15.3	5.6		21.1					
AREQUIPA	6	12			1	1			1	15
		80.0			6.7	6.7			6.7	8.0
		8.8			5.3	50.0			25.0	
PUNO	7	18	3					3	1	25
		72.0	12.0					12.0	4.0	13.4
		13.1	16.7					100.0	25.0	
ANCASH	8	23	2		3					28
		82.1	7.1		10.7					15.0
		16.8	11.1		15.8					
	COLUMN TOTAL	137	18	1	19	2	3	3	4	187
		73.3	9.6	.5	10.2	1.1	1.6	1.6	2.1	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
65.77497	49	0.0550	0.080	56 OF 64 (87.5%)

NUMBER OF MISSING OBSERVATIONS = 97

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR280 ACTIVIDADES-ESCRITAS

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR280 SI (1)	VAR280 NO (2)	ROW TOTAL
PIURA-TUMBES	1	18	10	28
		64.3	35.7	11.9
		9.6	20.8	
SAN MARTIN	2	25	8	33
		75.8	24.2	14.0
		13.3	16.7	
HUANUCO-PASCO-UC	3	22	7	29
		75.9	24.1	12.3
		11.7	14.6	
CALLAO	4	26	8	34
		76.5	23.5	14.4
		13.8	16.7	
ICA	5	26	1	27
		96.3	3.7	11.4
		13.8	2.1	
AREQUIPA	6	18	7	25
		72.0	28.0	10.6
		9.6	14.6	
PUNO	7	28	3	31
		90.3	9.7	13.1
		14.9	6.3	
ANCASH	8	25	4	29
		86.2	13.8	12.3
		13.3	8.3	
	COLUMN TOTAL	188	48	236
		79.7	20.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
13.32657	7	0.0645	5.085	NONE

NUMBER OF MISSING OBSERVATIONS = 48

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR325 DIAS EN LA SEMANA

VAR001	COUNT / ROW PCT / COL PCT	VAR325 .1	.2	.3	.4	.5	.6	.7	.8	ROW TOTAL
PIURA-TUMBES	1	3 12.0 10.0	1 4.0 3.8			3 12.0 15.0	8 32.0 22.9	10 40.0 12.2		25 11.2
SAN MARTIN	2	1 3.8 3.3	1 3.8 3.8	2 7.7 9.5		3 11.5 15.0	2 7.7 5.7	15 57.7 18.3	2 7.7 50.0	26 11.6
HUANUCO-PASCO-UC	3	3 10.7 10.0	2 7.1 7.7	2 7.1 9.5	1 3.6 16.7	2 7.1 10.0	5 17.9 14.3	13 46.4 15.9		28 12.5
CALLAO	4	5 14.7 16.7	2 5.9 7.7	5 14.7 23.8			9 26.5 25.7	13 38.2 15.9		34 15.2
ICA	5	2 7.4 6.7	2 7.4 7.7	5 18.5 23.8	3 11.1 50.0	2 7.4 10.0	3 11.1 8.6	9 33.3 11.0	1 3.7 25.0	27 12.1
AREQUIPA	6	1 4.2 3.3	6 25.0 23.1	3 12.5 14.3	1 4.2 16.7	3 12.5 15.0	3 12.5 8.6	7 29.2 8.5		24 10.7
PUNO	7	15 46.9 50.0	8 25.0 30.8	1 3.1 4.8	1 3.1 16.7	3 9.4 15.0	2 6.3 5.7	2 6.3 2.4		32 14.3
ANCASH	8		4 14.3 15.4	3 10.7 14.3		4 14.3 20.0	3 10.7 8.6	13 46.4 15.9	1 3.6 25.0	28 12.5
	COLUMN TOTAL	30 13.4	26 11.6	21 9.4	6 2.7	20 8.9	35 15.6	82 36.6	4 1.8	224 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
103.76495	49	0.0000	0.429	54 OF 64 (84.4%)

NUMBER OF MISSING OBSERVATIONS = 60

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR326 HORAS AL DIA

VAR001	COUNT / ROW PCT / COL PCT	VAR326 1	2	3	4	5	6	7	8	ROW TOTAL
PIURA-TUMBES	1	2 8.3 6.1	7 29.2 10.4	5 20.8 16.1	4 16.7 16.0	1 4.2 12.5	1 4.2 6.3	2 8.3 22.2	2 8.3 6.3	24 10.9
SAN MARTIN	2	5 17.9 15.2	10 35.7 14.9	2 7.1 6.5	2 7.1 8.0	5 17.9 62.5		2 7.1 22.2	2 7.1 6.3	28 12.7
HUANUCO-PASCO-UC	3	6 20.7 18.2	10 34.5 14.9	3 10.3 9.7	2 6.9 8.0	1 3.4 12.5	3 10.3 18.8	2 6.9 22.2	2 6.9 6.3	29 13.1
CALLAO	4	9 30.0 27.3	12 40.0 17.9	3 10.0 9.7	2 6.7 8.0		2 6.7 12.5		2 6.7 6.3	30 13.6
ICA	5	1 3.7 3.0	6 22.2 9.0	6 22.2 19.4	2 7.4 8.0	1 3.7 12.5	4 14.8 25.0		7 25.9 21.9	27 12.2
AREQUIPA	6	3 13.0 9.1	10 43.5 14.9	1 4.3 3.2	4 17.4 16.0		2 8.7 12.5	1 4.3 11.1	2 8.7 6.3	23 10.4
PUNO	7		5 15.6 7.5	5 15.6 16.1	4 12.5 16.0		3 9.4 18.8	2 6.3 22.2	13 40.6 40.6	32 14.5
ANCASH	8	7 25.0 21.2	7 25.0 10.4	6 21.4 19.4	5 17.9 20.0		1 3.6 6.3		2 7.1 6.3	28 12.7
	COLUMN TOTAL	33 14.9	67 30.3	31 14.0	25 11.3	8 3.6	16 7.2	9 4.1	32 14.5	221 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
86.35413	49	0.0008	0.833	56 OF 64 (87.5%)

NUMBER OF MISSING OBSERVATIONS = 63

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR336 REMUNERACION

VAR001	COUNT / ROW PCT / COL PCT	VAR336 DINERO (1)	REGALOS (2)	LIBERACION DE MI (3)	% DE LO QUE VENDO (4)	Voluntad NADA (5)	ROW TOTAL (6)
PIURA-TUMBES	1	11 42.3 12.4	1 3.8 6.3	.	2 7.7 15.4	12 46.2 10.8	26 11.2
SAN MARTIN	2	18 52.9 20.2	1 2.9 6.3	.	.	15 44.1 13.5	34 14.6
HUANUCO-PASCO-UC	3	16 55.2 18.0	2 6.9 12.5	.	.	11 37.9 9.9	29 12.4
CALLAO	4	4 11.1 4.5	1 2.8 6.3			31 86.1 27.9	36 15.5
ICA	5		.		11 40.7 84.6	16 59.3 14.4	27 11.6
AREQUIPA	6	13 61.9 14.6	2 9.5 12.5	.		2 9.5 66.7	4 19.0 3.6	21 9.0
PUNO	7	18 56.3 20.2	5 15.6 31.3	1 3.1 100.0		1 3.1 33.3	7 21.9 6.3	32 13.7
ANCASH	8	9 32.1 10.1	4 14.3 25.0				15 53.6 13.5	28 12.0
	COLUMN TOTAL	89 38.2	16 6.9	1 .4	13 5.6	3 1.3	111 47.6	233 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
148.90277	35	0.0000	0.090	32 OF 48 (66.7%)

NUMBER OF MISSING OBSERVATIONS = 51

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR342 INYECCIONES: MES PASADO

VAR001	COUNT / ROW PCT / COL PCT	VAR342 1 NINGUNA	2	3	4	5	6	ROW TOTAL
PIURA-TUMBES	1		5 20.0 7.8	8 32.0 15.7	6 24.0 13.3	2 8.0 11.1	4 16.0 19.0	25 12.1
SAN MARTIN	2		8 26.7 12.5	10 33.3 19.6	8 26.7 17.8	3 10.0 16.7	1 3.3 4.8	30 14.6
HUANUCO-PASCO-UC	3		3 12.0 4.7	9 36.0 17.6	10 40.0 22.2	1 4.0 5.6	2 8.0 9.5	25 12.1
CALLAO	4		6 24.0 9.4	7 28.0 13.7	4 16.0 8.9	3 12.0 16.7	5 20.0 23.8	25 12.1
ICA	5	1 4.3 14.3	3 13.0 4.7	5 21.7 9.8	7 30.4 15.6	3 13.0 16.7	4 17.4 19.0	23 11.2
AREQUIPA	6	1 5.9 14.3	9 52.9 14.1	1 5.9 2.0	3 17.6 6.7	2 11.8 11.1	1 5.9 4.8	17 8.3
PUNO	7	4 12.5 57.1	16 50.0 25.0	3 9.4 5.9	5 15.6 11.1	2 6.3 11.1	2 6.3 9.5	32 15.5
ANCASH	8	1 3.4 14.3	14 48.3 21.9	8 27.6 15.7	2 6.9 4.4	2 6.9 11.1	2 6.9 9.5	29 14.1
	COLUMN TOTAL	7 3.4	64 31.1	51 24.8	45 21.8	18 8.7	21 10.2	206 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
54.17521	35	0.0203	0.578	26 OF 48 (54.2%)

NUMBER OF MISSING OBSERVATIONS = 78

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR356 PROMOTOR ACTIVO/PASIVO

VAR001	COUNT / ROW PCT / COL PCT	VAR356 ACTIVO (1)	VAR356 PASIVO (2)	ROW TOTAL
PIURA-TUMBES	1	28 84.8 11.6	5 15.2 13.2	33 11.8
SAN MARTIN	2	33 100.0 13.6		33 11.8
HUANUCO-PASCO-UC	3	30 85.7 12.4	5 14.3 13.2	35 12.5
CALLAO	4	38 95.0 15.7	2 5.0 5.3	40 14.3
ICA	5	27 75.0 11.2	9 25.0 23.7	36 12.9
AREQUIPA	6	25 83.3 10.3	5 16.7 13.2	30 10.7
PUNO	7	32 74.4 13.2	11 25.6 28.9	43 15.4
ANCASH	8	29 96.7 12.0	1 3.3 2.6	30 10.7
	COLUMN TOTAL	242 86.4	38 13.6	280 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
19.99505	7	0.0056	4.071	6 OF 16 (37.5%)

NUMBER OF MISSING OBSERVATIONS = 4

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR357 SATISFACCION

VAR001	COUNT / ROW PCT / COL PCT	VAR357 SI (1)	VAR357 NO (2)	ROW TOTAL
PIURA-TUMBES	1	33 100.0 12.5		33 11.9
SAN MARTIN	2	33 97.1 12.5	1 2.9 6.7	34 12.2
HUANUCO-PASCO-UC	3	30 88.2 11.4	4 11.8 26.7	34 12.2
CALLAO	4	40 100.0 15.2		40 14.4
ICA	5	33 91.7 12.5	3 8.3 20.0	36 12.9
AREQUIPA	6	28 93.3 10.6	2 6.7 13.3	30 10.8
PUNO	7	39 95.1 14.8	2 4.9 13.3	41 14.7
ANCASH	8	27 90.0 10.3	3 10.0 20.0	30 10.8
	COLUMN TOTAL	263 94.6	15 5.4	278 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
9.23767	7	0.2360	1.619	8 OF 16 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 6

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR358 SATISFACCION - RAZONES

VAR001	COUNT / ROW PCT / COL PCT	VAR358: 1 AYUDAR A LA GENT	2 CURAR EN FERMEDAD	3 EDUCAR	4 SATISFAC C. PERSO	5 MEJORAR LA SALUD	6 COMUNICA CI.COMUN	7 MAS CONO CIMIENTO	8 OTRAS	ROW TOTAL
PIURA-TUMBES	1	12		1	18	1		1		33
		36.4		3.0	54.5	3.0		3.0		12.5
		11.0		16.7	29.0	11.1		7.7		
SAN MARTIN	2	8		2	9	2	13			34
		23.5		5.9	26.5	5.9	38.2			12.9
		7.3		33.3	14.5	22.2	35.1			
HUANUCO-PASCO-UC	3	15	2		9		1	1	2	30
		50.0	6.7		30.0		3.3	3.3	6.7	11.4
		13.8	11.1		14.5		2.7	7.7	22.2	
CALLAO	4	22	2	1	6	3	3	2		39
		56.4	5.1	2.6	15.4	7.7	7.7	5.1		14.8
		20.2	11.1	16.7	9.7	33.3	8.1	15.4		
ICA	5	25	1		5		2			33
		75.8	3.0		15.2		6.1			12.5
		22.9	5.6		8.1		5.4			
AREQUIPA	6	1	1	1	6		17	3		29
		3.4	3.4	3.4	20.7		58.6	10.3		11.0
		.9	5.6	16.7	9.7		45.9	23.1		
PUNO	7	16	6	1	5	3	1	3	3	38
		42.1	15.8	2.6	13.2	7.9	2.6	7.9	7.9	14.4
		14.7	33.3	16.7	8.1	33.3	2.7	23.1	33.3	
ANCASH	8	10	6		4			3	4	27
		37.0	22.2		14.8			11.1	14.8	10.3
		9.2	33.3		6.5			23.1	44.4	
	COLUMN TOTAL	109	18	6	62	9	37	13	9	263
		41.4	6.8	2.3	23.6	3.4	14.1	4.9	3.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
176.37259	49	0.0000	0.616	46 OF 64 (71.9%)

NUMBER OF MISSING OBSERVATIONS = 21

VAR001 REGION DE SALUD — CROSSTABULATION OF — BY VAR359 INSATISFACCION-RAZONES

VAR001	COUNT / ROW PCT / COL PCT	VAR359 1 NO PAGO	2 FALTA AP OYO CONU	3 FALTA AP OY.CENTR	4 FALTA AP OYO SANI	5 QUITA DE MASIA.	6 PROBL. E N LA FAM	8 PAGO NON P.PROM.	ROW TOTAL
SAN MARTIN	2	1 25.0 16.7	1 25.0 33.3	.	1 25.0 50.0	1 25.0 16.7			4 20.0
HUANUCO-PASCO-UC	3	2 50.0 33.3	.	.	.	2 50.0 33.3	.		4 20.0
ICA	5	2 66.7 33.3		.			1 33.3 100.0		3 15.0
AREQUIPA	6			1 33.3 100.0		1 33.3 16.7		1 33.3 100.0	3 15.0
PUNU	7	1 33.3 16.7		.	1 33.3 50.0	1 33.3 16.7			3 15.0
ANCASH	8		2 66.7 66.7	.	.	1 33.3 16.7			3 15.0
	COLUMN TOTAL	6 30.0	3 15.0	1 5.0	2 10.0	6 30.0	1 5.0	1 5.0	20 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
33.61110	30	0.2966	0.150	42 OF 42 (100.0%)

NUMBER OF MISSING OBSERVATIONS = 264

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR360 CONTINUAR-CESAR ACTIVO PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR360 CONTINUA CESAR 1	2	ROW TOTAL
PIURA-TUMBES	1	27 96.4 13.0	1 3.6 3.2	28 11.8
SAN MARTIN	2	28 87.5 13.5	4 12.5 12.9	32 13.4
HUANUCO-PASCO-UC	3	22 78.6 10.6	6 21.4 19.4	28 11.8
CALLAO	4	32 86.5 15.5	5 13.5 16.1	37 15.5
ICA	5	23 85.2 11.1	4 14.8 12.9	27 11.3
AREQUIPA	6	25 96.2 12.1	1 3.8 3.2	26 10.9
PUNO	7	27 87.1 13.0	4 12.9 12.9	31 13.0
ANCASH	8	23 79.3 11.1	6 20.7 19.4	29 12.2
	COLUMN TOTAL	207 87.0	31 13.0	238 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
7.48414	7	0.3803	3.387	8 OF 16 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 46

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR361 RAZONES-CONTINUAR ACTIVO

VAR001	COUNT / ROW PCT / COL PCT	VAR361: 1 ILA GENTE ME NECE	2 ACUERDO CON ASAM	3 ME GUSTA YUD.COMU	4 QUIERE A CIMIENTO	5 MAS CONO POYEN	6 CUANDO A SI	7 CAMPITA CION	8 OTRO	ROW TOTAL
PIURA-TUMBES	1	10		5	9	2	1			27
		37.0		18.5	33.3	7.4	3.7			12.9
		24.4		9.6	16.4	12.5	20.0			
SAN MARTIN	2	6	1	6	8	2	1	4	3	31
		19.4	3.2	19.4	25.8	6.5	3.2	12.9	9.7	14.8
		14.6	50.0	11.5	14.5	12.5	20.0	44.4	10.0	
HUANUCO-PASCO-UC	3	4		7	3	2	1	1	3	21
		19.0		33.3	14.3	9.5	4.8	4.8	14.3	10.0
		9.8		13.5	5.5	12.5	20.0	11.1	10.0	
CALLAO	4	4		8	11	2	1	1	6	33
		12.1		24.2	33.3	6.1	3.0	3.0	18.2	15.7
		9.8		15.4	20.0	12.5	20.0	11.1	20.0	
ICA	5	3		7	11	1	1		1	24
		12.5		29.2	45.8	4.2	4.2		4.2	11.4
		7.3		13.5	20.0	6.3	20.0		3.3	
AREQUIPA	6	5		7	5	3		2	3	25
		20.0		28.0	20.0	12.0		8.0	12.0	11.9
		12.2		13.5	9.1	18.8		22.2	10.0	
PUNO	7	4		11	5	3			3	26
		15.4		42.3	19.2	11.5			11.5	12.4
		9.8		21.2	9.1	18.8			10.0	
ANCASH	8	5	1	1	3	1		1	11	23
		21.7	4.3	4.3	13.0	4.3		4.3	47.8	11.0
		12.2	50.0	1.9	5.5	6.3		11.1	36.7	
	COLUMN TOTAL	41	2	52	55	16	5	9	30	210
		19.5	1.0	24.8	26.2	7.6	2.4	4.3	14.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
68.42675	49	0.0347	0.200	44 OF 64 (68.8%)

NUMBER OF MISSING OBSERVATIONS = 74

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR362 RAZONES-CESAR ACTIVO

VAR001	VAR362 (COUNT / ROW PCT / COL PCT)	1 FALTA DE PAGO	2 QUITA DE MASIAD.T	3 NO ME GU STA	4 MALTRATO DE MEDI	5 NO AYUDA N	6 FALTA DE MATERIA R	7 EMIF. TE ESTUD	8 Otro (quizar terrorismo estudios)	ROW TOTAL
PIURA-TUMBES	1	1 100.0 8.3								1 2.9
SAN MARTIN	2	1 20.0 8.3	1 20.0 33.3	1 20.0 100.0	1 20.0 33.3				1 20.0 8.3	5 14.7
HUANUCO-PASCO-UC	3	3 42.9 25.0	2 28.6 66.7						2 28.6 16.7	7 20.6
CALLAO	4	1 16.7 8.3			1 16.7 33.3				4 66.7 33.3	6 17.6
ICA	5	1 33.3 8.3			1 33.3 33.3	1 33.3 100.0				3 8.8
AREQUIPA	6								1 100.0 8.3	1 2.9
PUNO	7	3 60.0 25.0					1 20.0 100.0	1 20.0 100.0		5 14.7
ANCASH	8	2 33.3 16.7							4 66.7 33.3	6 17.6
COLUMN TOTAL		12 35.3	3 8.8	1 2.9	3 8.8	1 2.9	1 2.9	1 2.9	12 35.3	34 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
49.98809	49	0.4339	0.029	64 OF 64 (100.0%)

NUMBER OF MISSING OBSERVATIONS = 250

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR365 RAZONES ABANDONAR ACTIVO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR365: 1 DEMASIADO TRABAJ	2 NO PAGO	3 INTERF.CON OTRO	4 NO LES GUSTABA	5 EDAD - ENFERMEDA	6 FALTA DE MATERRI	7 ESTUDIAR	8 MATRI/VIAJE/PRCB	ROW TOTAL
1 PIURA-TUMBES		2	2	3		1			4	12
		16.7	16.7	25.0		8.3			33.3	10.1
		16.7	5.3	9.7		25.0			26.7	
2 SAN MARTIN			4	1	2		1	1	1	10
			40.0	10.0	20.0		10.0	10.0	10.0	8.4
			10.5	3.2	25.0		12.5	33.3	6.7	
3 HUANUCO-PASCO-UC		4	5	4			1			14
		28.6	35.7	28.6			7.1			11.8
		33.3	13.2	12.9			12.5			
4 CALLAO		2	1	3	1	2	2		4	15
		13.3	6.7	20.0	6.7	13.3	13.3		26.7	12.6
		16.7	2.6	9.7	12.5	50.0	25.0		26.7	
5 ICA		1	2	6	1		2	2	1	15
		6.7	13.3	40.0	6.7		13.3	13.3	6.7	12.6
		8.3	5.3	19.4	12.5		25.0	66.7	6.7	
6 AREQUIPA		1	5	7		1			2	16
		6.3	31.3	43.8		6.3			12.5	13.4
		8.3	13.2	22.6		25.0			13.3	
7 PUNO		1	17	2	1		1			22
		4.5	77.3	9.1	4.5		4.5			18.5
		8.3	44.7	6.5	12.5		12.5			
8 ANCASH		1	2	5	3		1		3	15
		6.7	13.3	33.3	20.0		6.7		20.0	12.6
		8.3	5.3	16.1	37.5		12.5		20.0	
	COLUMN TOTAL	12	38	31	8	4	8	3	15	119
		10.1	31.9	26.1	6.7	3.4	6.7	2.5	12.6	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
81.85764	49	0.0022	0.252	61 OF 64 (95.3%)

NUMBER OF MISSING OBSERVATIONS = 165

506

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR366 FUNCION MAS IMPORTANTE DEL PROM. ACTIVO

VAR001	COUNT / ROW PCT / COL PCT	VAR366 1 CURAR EN IFERMEDAD	2 PRIMEROS AUXILIO	3 DAR CHAR LAS EDUC	4 ATENDER NINOS	5 EDUCAR C OMUNIDAD	6 PREVENIR	7 SER RESP .EN SU T	8 COLA.COM /MAS.CAP	ROW TOTAL
PIURA-TUMBES	1	5	5	4	1	5	1	4	2	27
		18.5	18.5	14.8	3.7	18.5	3.7	14.8	7.4	11.5
		15.6	8.1	12.9	25.0	17.9	3.6	19.0	6.9	
SAN MARTIN	2	3	9	2		3	1	8	4	30
		10.0	30.0	6.7		10.0	3.3	26.7	13.3	12.8
		9.4	14.5	6.5		10.7	3.6	38.1	13.8	
HUANUCO-PASCO-UC	3	3	9	1	2		5	2	7	29
		10.3	31.0	3.4	6.9		17.2	6.9	24.1	12.3
		9.4	14.5	3.2	50.0		17.9	9.5	24.1	
CALLAO	4	8	3	7		6	4	4	5	37
		21.6	8.1	18.9		16.2	10.8	10.8	13.5	15.7
		25.0	4.8	22.6		21.4	14.3	19.0	17.2	
ICA	5	3	6	2		5	3		8	27
		11.1	22.2	7.4		18.5	11.1		29.6	11.5
		9.4	9.7	6.5		17.9	10.7		27.6	
AREQUIPA	6	2	6	5	1	4	4	2		24
		8.3	25.0	20.8	4.2	16.7	16.7	8.3		10.2
		6.3	9.7	16.1	25.0	14.3	14.3	9.5		
PUNO	7	5	4	8		4	9		2	32
		15.6	12.5	25.0		12.5	28.1		6.3	13.6
		15.6	6.5	25.8		14.3	32.1		6.9	
ANCASH	8	3	20	2		1	1	1	1	29
		10.3	69.0	6.9		3.4	3.4	3.4	3.4	12.3
		9.4	32.3	6.5		3.6	3.6	4.8	3.4	
	COLUMN TOTAL	32	62	31	4	28	28	21	29	235
		13.6	26.4	13.2	1.7	11.9	11.9	8.9	12.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
106.61455	49	0.0000	0.409	55 OF 64 (85.9%)

NUMBER OF MISSING OBSERVATIONS = 49

07 MAY 84 ENCUESTA DEL PROMOTOR
15:28:27 UNIVERSIDAD CATOLICA DEL PERU IBM 4331 - L02 VM/SP 8206+

VAR001 REGION DE SALUD — CROSSTABULATION OF PROBLEMAS- ACTIVO BY VAR368

VAR001 (COUNT / ROW PCT / COL PCT)	VAR368: 1 FALTA DE PAGO	2 TRABAJO DURO	3 FALTA APOYO-COMUNICAM-MA	4 FALTA MEDICAM-MA	5 FALTA TIEMPO	6 PAGO APOYO MEDIC	7 APOYO MEDIC.	8 otros	ROW TOTAL
1 PIURA-TUMBES	12 42.9 14.8	3 10.7 60.0	2 7.1 7.7	10 35.7 27.8		1 3.6 2.3			28 11.9
2 SAN MARTIN	9 30.0 11.1		1 3.3 3.8	9 30.0 25.0		6 20.0 14.0	4 13.3 10.5	1 3.3 16.7	30 12.7
3 HUANUCO-PASCO-IX	9 31.0 11.1		4 13.8 15.4	1 3.4 2.8		8 27.6 18.6	6 20.7 15.8	1 3.4 16.7	29 12.3
4 CALLAO	3 8.1 3.7	1 2.7 20.0	9 24.3 34.6	2 5.4 5.6		5 13.5 11.6	15 40.5 39.5	2 5.4 33.3	37 15.7
5 ICA	16 59.3 19.8		6 22.2 23.1	5 18.5 13.9					27 11.4
6 AREQUIPA	8 33.3 9.9			1 4.2 2.8	1 4.2 100.0	5 20.8 11.6	8 33.3 21.1	1 4.2 16.7	24 10.2
7 PUNO	11 34.4 13.6	1 3.1 20.0	1 3.1 3.8	3 9.4 8.3		15 46.9 34.9		1 3.1 16.7	32 13.6
8 ANCASH	13 44.8 16.0		3 10.3 11.5	5 17.2 13.9		3 10.3 7.0	5 17.2 13.2		29 12.3
COLUMN TOTAL	81 34.3	5 2.1	26 11.0	36 15.3	1 .4	43 18.2	38 16.1	6 2.5	236 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
133.51555	49	0.0000	0.102	47 OF 64 (73.4%)

NUMBER OF MISSING OBSERVATIONS = 48

58

07 MAY 84 E N C U E S T A D E L P R O M O T O R
15:28:32 UNIVERSIDAD CATOLICA DEL PERU IBM 4331 - L02 VM/SP 8206+

PAGE 17C

- C R O S S T A B U L A T I O N O F -
VAR001 REGION DE SALUD BY VAR369 PROBLEMAS- PASIVO
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR369 1 FALTA DE PAGO	2 TRABAJO DURO	3 CONDICIONES DIFI	4 FALT.DE MEDICAM-	5 FALTA DE VIATICO	6 FALTA DE TIEMPO	8 OTROS	ROW TOTAL
PIURA-TUMBES	1	1 20.0 4.0		1 20.0 20.0	1 20.0 25.0		2 40.0 66.7		5 12.2
SAN MARTIN	2	1 50.0 4.0					1 50.0 33.3		2 4.9
HUANUCO-PASCO-UC	3	5 100.0 20.0							5 12.2
CALLAC	4	2 100.0 8.0							2 4.9
ICA	5	6 66.7 24.0		3 33.3 60.0					9 22.0
AREQUIPA	6	2 33.3 8.0		1 16.7 20.0	2 33.3 50.0			1 16.7 50.0	6 14.6
PUNU	7	7 63.6 28.0	1 9.1 100.0		1 9.1 25.0	1 9.1 100.0		1 9.1 50.0	11 26.8
ANCASH	8	1 100.0 4.0							1 2.4
	COLUMN TOTAL	25 61.0	1 2.4	5 12.2	4 9.8	1 2.4	3 7.3	2 4.9	41 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
39.75011	42	0.5702	0.024	54 OF 56 (96.4%)

NUMBER OF MISSING OBSERVATIONS = 243

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR467 GRADO DE COOPERACION

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR467 1 MUY BUEN	2 BUENO	3 REGULAR	4 MALO	9	ROW TOTAL
PIURA-TUMBES	1	13 40.6 16.7	10 31.3 6.8	8 25.0 21.6		1 3.1 50.0	32 12.0
SAN MARTIN	2	6 18.2 7.7	15 45.5 10.2	11 33.3 29.7	1 3.0 33.3		33 12.4
HUANUCO-PASCO-UC	3	8 24.2 10.3	23 69.7 15.6	2 6.1 5.4			33 12.4
CALLAO	4	10 26.3 12.8	23 60.5 15.6	5 13.2 13.5			38 14.2
ICA	5	5 16.7 6.4	23 76.7 15.6	1 3.3 2.7	1 3.3 33.3		30 11.2
AREQUIPA	6	8 25.8 10.3	20 64.5 13.6	2 6.5 5.4	1 3.2 33.3		31 11.6
PUNU	7	14 34.1 17.9	19 46.3 12.9	7 17.1 18.9		1 2.4 50.0	41 15.4
ANCASH	8	14 48.3 17.9	14 48.3 9.5	1 3.4 2.7			29 10.9
	COLUMN TOTAL	78 29.2	147 55.1	37 13.9	3 1.1	2 .7	267 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
48.59369	28	0.0092	0.217	22 OF 40 (55.0%)

NUMBER OF MISSING OBSERVATIONS = 17

510

P

CODIFICACION - COMUNIDAD

Tarjeta 1

Var.	Preg.		Columna
1	A1	Región de Salud 0 no información 1 Piura-Tumbes 2 San Martin 3 Huánuco-Pasco-Ucayali 4 Callao 5 Ica 6 Arequipa 7 Puno 8 Ancash	6
2	A1	Area Hospitalaria 0 no información 1 Piura 2 Sullana 3 Moyabamba 4 Tarapoto-Lamas 5 Pucallpa 6 Tingo Maria 7 Chacay 8 Collique 10 Ica-Palpa-Nazca 11 Pisco-Castrobirreyna 12 Arequipa 13 Castilla 14 Melgar-Carabaya 15 Puno-Chucuito 16 Huaraz 17 Pomabamba	7 8
3	A1	Comunidad, caserío, vecindad Región Piura - AHA Piura 1 Rio Viejo Sur 2 Sta. Elena (Casa Grande) 3 Chaquira " 4 Vichayal " 5 Alto de los Carillos " 6 Alto de la Cruz " 7 Loma Negra Sur " 8 Paredones (Simbila) 10 Mocora " 11 Monte Castillo " 12 Simbila " 13 Molino Azul " 14 La Piedra " 15 La Arena (La Arena) 16 Monte Redondo " 17 El Penal " 18 Nuevo Tamarindo " 19 Pampa de los Silvas " Asentamiento 13 de Abril 20 Alto de los Mores " 21 Monte Grande " 22 Alto de los Castillos " 23 Canisal Chico " 24 Chatito " Región Piura - AHA Sullana 36 La Bocena (Miramar) 37 Miramar "	9 10 11

Tarjeta 1

Var.	Preg.		Columna
3	A1	Comunidad, caserío, vecindad	9 10 11

Región Piura - AHA Sullana (con't)

38 Cas. San Luis (Miramar)
39 Tamarindo (San Pedro)
40 Tamarindo (Monte Lima)
41 Ignacio Escudero "
42 Tamarindo (La Libertad)
43 Mallaritos "
44 Mallares (Mallaritos)
45 Mallaritos (La Quinta)

Región San Martín - AHA Moyobamba-Rioja

61 Rafael Belaunde
62 José Cáluce
63 Nvo. Tabalosos
64 Nva. Esperanza
65 Pioneros
66 Porvenir
67 Mirador
68 Yarinal
69 Tumbaro
70 Ochame
71 Sinamal
72 Shimpiyacu
73 Perla Mayo
74 Alto Naranjillo

Región San Martín - AHA Tarapoto-Lamas

90 Shapumba
91 Auca Loma
92 Carrapata
93 Pucayacu
94 Panjui
95 Huimbamuyuna
96 3 de Octubre
97 San Fernando
98 Carañayaco
99 Pampa Hermosa
100 Vista Alegre
101 Pampa Jacu
102 San Martín de Cumbaza
103 San Juan de Tallionihiu
104 Santa Cruz
105 Nuevo Mundo
106 Huapo
107 Huayco
108 Alto Shamboyacu
109 Bellavista
110 Poloponta

Región Huánuco - AHA Pucallpa

126 Nuevo San Lorenzo (C. nativa)
127 Belgica
128 Nueva Unión
129 Campo Grande
130 9 de Octubre
131 Patria Nueva
132 Panailio
133 Calleria
134 Flor de Ucayali
135 Campo Verde
136 Nuevo Saposa (C. nativa)
137 Los Milagros

Var. 3 | Preg. A1 | 3 | Tarjeta 1 Columna 9- TO II

Comunidad, caserío, vecindad

Región Huánuco - AHA Tingo María

149 San Andrés
150 San Juan Tulumayo
151 La Colorada
152 Topa
153 Santa Rosa Quezada
154 Cayumba
155 Chagua Nueva
156 Bella Vista
157 Fazo Grande
158 Corvinilla
159 Puerto Prado
160 Pueblo Joven 5 de Nov.
161 La Florida
162 Pendencia
163 La Roca
164 Camote
165 Bella Alta
166 Manchurio
167 Inuti

Región Callao - AHA Chucay

179 Ravira
180 Vicha y Cocha
181 Chauca
182 Pirca
183 Chisque
184 Cormo
185 Piscocoto
186 Coto
187 Lampian
188 Canchapilca
189 Puna
190 Carac
191 Gramadeles (Gramorales)
192 San Graciano
193 San Miguel
194 Pallac
195 Pueblo Libre
196 Boza
197 Cara Viuja

Región Callao - AHA Collique

212 San Miguel
213 Obrajillo
214 Panamarca
215 Carmen Alto
216 La Juventud
217 Manco Inca

Tarjeta 1
Columna

Var.	Preg.	
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Callao - AHA Colliquo

218 La Balanza
219 San Gabriel
220 San Ramón
221 Kennedy
222 Primavera
223 San Martin
224 Santa Rosa de Quivoq
225 Yaso
226 Collo
227 Tocahuasi
228 Apto Viscas
229 San Buena Bentura
230 Kunray

Región Ica - AHA Ica-Palpa-Nazca

245 Caserio el Olivio
246 Caserio Camino de Reyes
247 Caserio Congar
248 Caserio Cerro Prieto
249 P.J. La Angustura
250 Paviña Grande - Pueblo Nuevo
251 Callejon de los Espinos - Pueblo Nuevo
252 Barrio Los Charpes Callejon- Pueblo Nuevo
253 Pampa de Yatasi - Pueblo Nuevo
254 Pongo las Segarra - Pueblo Nuevo
255 Chuapaco - Pueblo Nuevo
256 Sunampe
257 Huamanquilla
258 Tallamana
259 El Arenal
260 Los Piscontes
261 Los Aquijes
262 Rosario de Yanca
263 Distrito Cuadalupe

Tarjeta 1

Var.	Preg.	Columna
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Ica - AHA Pisco-Castrovirreyna

277 Pisco
278 San Clemente
279 Villa Tupac Amaru
280 San Andres

Región Arequipa - AHA Arequipa

296 Tapay y Cosnirhua (Provincia de Caylloma)
297 Huambo "
298 Pinchollo "
299 Cabanacondo "
300 Yanque "
301 Achoma "
302 Coporaque "
303 Maca "
304 Tuti "
305 Callalli "
306 Sibayo "
307 Miguel Grau (Provincia de Arequipa)
308 Mollebaya "
309 Characato "

Región Arequipa - AHA Castilla

325 Ccochapampa (Provincia de Cotahuasi)
326 Pampamarca "
327 Harhua "
328 Mungui "
329 Quillunza "
330 Chupacra (Localidad de Viraco)
331 Tipan "
332 Paracolca "
333 Tagre "
334 Cahuana (Provicia de Cotahuasi)
335 Piramarca "
336 Luicho "
337 Antabamba "

Var.	Preg.		Tarjeta 1 Columna
8	A1		9 10 11

Comunidad, caserío, vecindad

Región Arequipa - AHA Castilla (cont')

338 Visbe (Provincia de Cotahuasi)
339 Achambi "
340 Locrahuanca "
341 Hyanacotas "

Región Puno - AHA Melgar-Caraballa

357 Paylla (Ayaviri #3)
358 Selque-Macari
359 Ccollama-Macari
360 Umachiri
361 Parc Corani
362 Bajo Ccollana-Macari
363 Jatón-Sayma
364 Isla Kaluzo (Melgar Carabaya #38)
365 Vizcachri
366 Huichullo
367 Cuchoprijo (Nuñoa)
368 Sincata
369 Anchallani
370 Balsapata
371 Isla Malcijo

Región Puno - AHA Puno-Chucuito

387 Cawalla
388 Huilamocco
389 Cari-Cari
390 Chinchera
391 Potojeni Grande
392 Tejquina
393 Pahamaya
394 Unicachi
395 Capaxi
396 Yabin-Huatla
397 Poxin Carata
398 Ticana Cusullaca
399 Chaullacamani (P.S. Chipana)
400 Huety
401 Tara Cancamaya
402 Usasa (P.S. Chipena)
402 Villa Moquero
404 Tapapisi Challampampa
405 Copani
406 Calacoto
407 Parcialidad Molino
408 Ancraruyo-Riva
409 Anco Puto-Cuarto Corgicha
410 Arasaya-Pizacoma

Tarjeta 1

Var.	Preg.	Columna
3	A1	9 10 11

Comunidad, caserío, vecindad

Región Puno - AHA Puno-Chucuito (cont')

411 Bajo Airiquas
412 Parco
413 Parco-Sector Arboleda
414 Allavaya
415 Pajana Mohocachi
416 Timicachi-Sihualaya
417 Huayllani
418 Silla Muri

Región Anchash - AHA Huaraz

419 Jirac, Sirac, Dirac
420 Arhcay
421 Shinan
422 Chorrillos
423 Tinco
424 Pumarranga
425 Huino
426 Shirapata
427 Quireahuayi
428 Huashao
429 Encayoc
430 Shancac
431 Canray Chico
432 Jauna
433 Pacchanga
434 Yacup
435 Iscap
436 Cochapampa
437 Tayapampa
438 Ancoraca
439 Chuyo
440 Cantu
441 Cahcpar
442 Huacanhuasi
443 Pariapata
444 Santo Toribio
445 Uchuhuayta
446 Llocila
447 Cayapampa
448 Shirapata
449 Millurish
450 Pariapata
451 Chavin
452 Marcac
453 Picup
454 Cajapampa

Var.	Prog.	Columna	
4	A2	12	Zona Ecológica 0 No información 1 Costa 2 Selva Baja 3 Selva Alta 4 Sierra - Sur 5 Sierra - Norte Centro
5	A3	13	Población de la Comunidad 0 No información 1 Menos de 500 2 500 - 10000 3 1000 - 1500 4 1500 - 2000 5 más de 2000
6	A4	14	Material del Techo 0 No información 1 Teja 2 Calamina 3 Paja 4 Eternit 5 Otro 6 Carrizo
7	A5	15	Material del Piso 0 No información 1 Tierra 2 Madera 3 Cemento 4 Tierra y cemento 5 Otro
8	A6	16	Habitaciones en la Casa 0 No información 1 - 9 Número actual
9	B1	17	Sexo del informante 0 No informacion 1 Hombre 2 Mujer
10	B2	18 19	Edad del informante 00 No información 1 - 98 Años

Var.	Preg.	Columna	
11	B3	20	Estado Civil del informante 0 No información 1 Casado 2 Viudo 3 Soltero 4 Conviviente 5 Divorciado
12	B4	21 22	Número de hijos 00 No información 1 - 98 99 No aplicable
13	B5	23	Habilidad para leer y escribir 0 No información 1 Si 2 No
14	B6	24	Grado de Escolaridad 0 No información 1 Ninguno 2 2 de primaria 3 5 de primaria 4 1-2 de secundaria 5 más
	B7		Idiomas del informante más que Español
15		25	Quechua 0 No información 1 Si 2 No
16		26	Aymara 0 No información 1 Si 2 No
17		27	Aguaruna 0 No información 1 Si 2 No

Tarjeta 1

Var.	Preg.	Columna	
18		28	**Shipivo** 0 No información 1 Sí 2 No
19		29	**Otro** 0 No información 1 Sí 2 No
20	B8	30	**Idioma Principal de la Comunidad** 0 No información 1 Castellano 2 Quechua 3 Aymara 4 Aguaruna 5 Shipivo 6 Otro 7 Otro 8 Otro
21	B9	31	**Otro Idioma de la Comunidad** 0 No información 1 Ninguno 2 Quechua 3 Aymara 4 Aguaruna 5 Shipivo 6 Otro 7 Otro 8 Otro
22	B10	32 33 34 35	**Tiempo de Vivir en la Comunidad** 0000 No información
23	B11	36	**Trabajo Principal** 0 No información 1 Agricultura de consumo propio 2 Agricultura comercial 3 Independiente 4 Ama de casa 5 Trabajo no asalariado 6 Ambulante 7 Otros 8 Otros

Var.	Preg.	Columna	
24	C1	37 38 . 39	Distancia al Puesto de Salud más cercano 00 No información 0.0-99.8 Kms.
25	C1	40 41 42 43 horas min.	Tiempo para llegar al Puesto de Salud 0000 No información 0.0-9.9 Horas
26	C2	44 45 . 46	Distancia al Centro de Salud más cercano 000 No información 0.0-99.8 Kms.
27	C2	47 48 49 50	Tiempo a llegar al Centro de Salud 0000 No información Horas Minutos
28	C3	51	Disponibilidad de Servicios de Salud en La Comunidad 0 No información 1 Si 2 No 3 No sabe
29	C4	52	Tipo de Servicio de Salud 0 No información 1 Centro médico 2 Promotor de salud 3 Partera tradicional 4 Huesero 5 Consultorio médico particular 6 Botiquín Comunal 7 8
30	C5	53	Recursos en la Comunidad Promotor de Salud 0 No información 1 Si 2 No 3 No sabe

Tarjeta 1 12

Var.	Preg.	Columna	
31	C5	54	Vigia 0 No inform ión 1 Si 2 No 3 No sabe
32		55	Rigchary 0 No información 1 Si 2 No 3 No sabe
33		56	Partera 0 No información 1 Si 2 No 3 No sabe
34		57	Farmacia 0 No información 1 Si 2 No 3 No sabe
35		58	Botica 0 No información 1 Si 2 No 3 No sabe
36		59	Botiquín Comunal 0 No información 1 Si 2 No 3 No sabe
37		60	Curandero 0 No información. 1 Si 2 No 3 No sabe

Var.	Preg.	Columna	
38	C5	61	**Huesero**
			0 No información
			1 Si
			2 No
			3 No sabe
39		62	**Yerbatero**
			0 No información
			1 Si
			2 No
			3 No sabe
40		63	**Otros**
			0 No información
			1 Si
			2 No
			3 No sabe
41	C6	64	Número de Parteras en la Comunidad
			0 No información
			1-8
			9 No aplica
42	C7	65	**Conocimiento si la Partera ha sido capacitada**
			0 No información
			1 Si
			2 No
			3 No sabe
43	C8	66	**Definición de Promotor de Salud**
			0 No información
			1 El que vende medicinas
			2 El que presta servicios primeras atenciones
			3 El que presta primeros auxilios
			4 Persona que trabaja en la Iglesia
			5 Persona que atiende a los niños
			6 Lo mismo que sanitario
			7
			8 Desconoce, nunca ha escuchado
			9 No aplicable

Var.	Preg.	Columna	
44	C9	67	**Residencia del Promotor en la Comunidad** 0 No información 1 Sí 2 No 3 No sabe
45	C10	68	**Conocimiento del Nombre del Promotor** 0 No información 1 Sí 2 No
46	C11	69	**Conocimiento del Promotor con Nombre Mencionado** 0 No información 1 Sí 2 No
47	C12	70	**Sexo del Promotor en la Comunidad** 0 No información 1 Hombre 2 Mujer 3 Hombre y Mujer
48	C13	71	**El Promotor debe ser:** 0 No información 1 Hombre 2 Mujer
49	C14	72	**Razón para que el Promotor sea hombre o mujer** 0 No información 1 Hombre - sabe más, da protección 2 Hombre - puede salir de noche - más tiempo 3 Hombre - más fuerte, más autoridad 4 Mujer - es más responsable 5 Mujer - da más confianza 6 Mujer - trata mejor con mujeres 7 Debe haber los dos - atiende cada uno su sexo 8 No importa - solo que quiera trabajar 9 No aplicable

Var.	Preg.	Columna	
50	C15	73	**Conocimiento sobre quién eligió al Promotor** 0 No información 1 Si 2 No 3 No saben
51	C16	74 75	**Persona o entidad responsable para elegir Promotor** 0 No información 1 Comite de salud 2 Alcalde 3 Sanitario o Auxiliar enfermeria 4 Personal del Centro de salud 5 Personal del hospital 6 Miembros de la Comunidad 7 Líderes de la Comunidad 8 Comite de desarrollo 9 No aplicable 10 Otros
52	C17	76	**Participación del informante en la selección del Promotor** 0 No información 1 Si 2 No
53	C18	77	**Conocimiento de un promotor pasivo en la Comunidad** 0 No información 1 Si 2 No
54	C19	78	**Razón por no trabajar del Promotor pasivo** 0 No información 1 emigró 2 renunció trabajo 3 falta de pago 4 falta de medicina 5 6 7 8 9 No aplicable

Tarjeta 1

Var.	Preg.	Columna	
55	C20	77	Consultas al promotor
			0 No información
			1 Si
			2 No

Tarjeta 2

Var.	Preg.	Columna	
56	C21	6 7	Tipos de Prob. de Salud
			0 No información
			1 Control de natalidad
			2 Dolores de parto, hemorragia
			3 Atiendo a hijos, familia
			4 o medicinas
			5 ronta inyecciones
			6 Aconseja sobre higiene
			7 Gripe, resfrios, pulmón
			8 Diarreas
			9 No aplicable
			10 Ulceras
			11 Fiebres, paludismo
			12 Intoxicaciones
			13 Nutrición
			14 Enfermedades de la Piel
			15 Reumatismo
			16 Heridas
			17 malaria 18 enfermedades contagiosas
57	C22	8 9	Razones para no ir al Promotor
			0 No información
			1 No tiene medicinas
			2 No tiene sales rehidratantes
			3 No lo necesitamos
			4 No le tenemos confianza
			5 El centro medico queda cerca
			6 No lo conozco
			7 No se que es
			8
			9 No aplicable

Var.	Preg.	Columna	
58	C23	10	**Visitas Domiciliarias del Promotor** 0 No información 1 Si 2 No
59	D1	11	**Definición del Comité de Salud** 0 No información 1 Agrupaciones del Mininterio de Salud 2 Grupos que ven problemas de salud 3 Los que ayudan a resolver problemas de salud 4 Conjunto que ayuda al Promotor 5 Gente de la Comunidad 6 7 8 No saben 9 No aplicable
60	D2	12	**Existencia del Comité de Salud en la Comunidad** 0 No información 1 Si 2 No 3 No saben
61	D3	13	**Existencia anterior de un Comité de Salud** 0 No información 1 Si 2 No 3 No saben
62	D4	14 15 16 17 años meses	**Tiempo de disolución del Comité de Salud** 0 No información Años Meses
63	D5	18	**Responsable de organizar el Comité de Salud** 0 No información 1 Promotor 2 Auxiliar sanitario 3 Grupo comunal 4 Alcalde 5 Lideres locales 6 7 8 Otros 9 No aplicable

Var.	Preg.	Columna	
64	D6	19	**Informante-miembro ahora o antes del Comite de Salud** 0 No información 1 Si 2 No 3 No sabe
65	D7	20	**Promotor forma parte del Comité de Salud** 0 No información 1 Si 2 No 3 No sabe
66	D8	21	**Apoyo del Comité de Salud al Promotor** 0 No información 1 Si 2 No 3 No sabe
67	D9	22	**Manera de Apoyar del Comité de Salud al Promotor** **Alojamiento** 0 No información 1 Si 2 No menciona
68		23	**Comida** 0 No información 1 Si 2 No menciona
69		24	**Salario** 0 No información 1 Si 2 No menciona
70		25	**Consultorio** 0 No información 1 Si 2 No menciona
71		26	**Viático** 0 No información 1 Si 2 No menciona

Var.	Preg.	Columna	
72	D9	27	Material de construcción 0 No información 1 Si 2 No menciona
73		28	Transporte 0 No información 1 Si 2 No menciona
74		29	Capacitación 0 No información 1 Si 2 No menciona
75		30	Exoneración de trabajo comunal 0 No información 1 Si 2 No menciona
76		31	No sabe 0 No información 1 Si 2 No menciona
77		32	Otro 0 No información 1 Si 2 No menciona
78		33	Otro 0 No información 1 Si 2 No menciona
79		34	Otro 0 No información 1 Si 2 No menciona

Var.	Preg.	Columna	
80	E1	35	La última persona enferma en la casa 0 No información 1 Adulto femenino 2 Adulto masculino 3 Niño mayor de 5 4 Niño menor de 5 5 Casi todos
81	E2	36	La enfermedad de la persona 0 No información 1 Gripe o resfriado, fiebres 2 Estómago 3 Accidente 4 Envenenamiento 5 Diarrea o parásitos 6 Nutrición 7 Complicaciones de parto, hemorragias 8 Otro - Malaria, Tuberculosis 9 No aplicable
82	E3	37	El informante fue al Promotor para ayuda 0 No información 1 Sí 2 No
83	E4	38 39	Los mejores consejos para la enfermedad 0 No información 1 Médico 2 Promotor de salud 3 Sanitario 4 Enfermero/a 5 Farmacéutico 6 Partera 7 Curandero/a 8 Pariente 9 No aplicable 10 Amigo 11 12 13 14 15 Otro

Var.	Preg.	Columna	
84	E5	40	**Han ido al Promotor para curar diarrea del niño** 0 No información 1 Si 2 No
85	E6	41	**El Promotor ha enseñado a hervir el agua** 0 No información 1 Si 2 No
86	E7	42 43	**Remedio del Promotor para tratar diarrea** 0 No información 1 Sales rehidratantes 2 Suero casero 3 Jarabe antidiarréico 4 Mandó al puesto o centro de salud 5 No sabe 6 Nada 7 Yerbas 8 Antibióticos 9 No aplicable 10 Otro 11 Otro
87	E8	44	**Uso de agua hervida en en prep. de ORS o suero casero** 0 No información 1 Si 2 No 3 No sabe
88	E9	45	**Consejo del Promotor sobre alimentación del niño en tratamiento por diarrea** 0 No información 1 Continuar la alimentación 2 Suspender la alimentación 3 Suspender la leche materna 4 No dijo nada 5 No se acuerda
89	E10	46	**Tratamiento del Promotor para gripe o resfriado** 0 No información 1 Si 2 No

Var.	Preg.	Columna	
90	E11	47	**Indicaciones del Promotor para resfriado o gripe** 0 No información 1 Pastillas 2 Jarabe 3 Inyección 4 Dolcita salvadora 5 No se acuerda
91	E12	48	**Disponibilidad de medicinas para gripe o resfrio** 0 No información 1 Medicina dada por el Promotor 2 Dijo donde conseguir 3 No dió ni dijo donde 4 No sé
92	E13	49	**Campaña de Vacunación en la Comunidad en el año pasado** 0 No información 1 Si 2 No 3 No sabe
93	E14	50	**Participación del Promotor en Campaña de Vacunación** 0 No información 1 Si 2 No 3 No sabe
94	E15	51	**Atención de partos por el Promotor en la Casa** 0 No información 1 Si 2 No 3 No sabe
95	E16	52	**Acciones del Promotor antes de atender el parto** **Hirvió el agua** 0 No información 1 Si 2 No 3 No sabe

Var.	Preg.	Columna	
96	E15	53	Lavó manos 0 No información 1 Si 2 No 3 No sabe
97		54	Lavó las partes de la madre 0 No información 1 Si 2 No 3 No sabe
98		55	Palpó el vientre de la madre 0 No información 1 Si 2 No 3 No sabe
99		56	Otro _____ 0 No información 1 Si 2 No 3 No sabe
100		57	Nada 0 No información 1 Si 2 No 3 No sabe
	E17		Acciones del promotor para atender el recién nacido
101		58	Curación del cordón umbilical 0 No información 1 Si 2 No 3 No sabe
102		59	Aplicación de gotas a los ojos 0 No información 1 Si 2 No 3 No sabe

Var.	Freq.	Columna	
103	S17	60	Revisión al niño 0 No información 1 Si 2 No 3 No sabe
104		61	Peso al niño 0 No información 1 Si 2 No 3 No sabe
105		62	Indicó como alimentarlo 0 No información 1 Si 2 No 3 No sabe
106		63	Consejos para inscribir 0 No información 1 Si 2 No 3 No sabe
107		64	Consejos de imp. de control médico 0 No información 1 Si 2 No 3 No sabe
108		65	Consejos sobre imp. de vacunas 0 No información 1 Si 2 No 3 No sabe
109		66	Otro _____ 0 No información 1 Si 2 No 3 No sabe
110	F1	67	Asistencia en charlas del Promotor 0 No información 1 Si 2 No

Var.	Preg.	Columna	
	F2		Temas de las Charlas del Promotor
111		68	Aseo Personal 0 No información 1 Si 2 No
112		69	Disposición de basuras y excretas 0 No información 1 Si 2 No
113		70	Importancia de vacunas 0 No información 1 Si 2 No
114		71	Importancia de letrinas 0 No información 1 Si 2 No
115		72	Prevención de diarrea 0 No información 1 Si 2 No
116		73	Bienestar de la mujer embarazada 0 No información 1 Si 2 No
117		74	Prevención de parásitos 0 No información 1 Si 2 No
118		75	Nutrición y manejo de alimentos 0 No información 1 Si 2 No
119		76	Importancia de planificación familiar 0 No información 1 Si 2 No

Tarjeta 2

Var.	Preg.	Columna	
120	F2	77	Lactancia maturna y destete 0 No información 1 Si 2 No
121		78	Otros _____ 0 No información 1 Si 2 No
122		79	Otros _____ 0 No información 1 Si 2 No
	F3		Actividades del promotor
123		80	Primeros auxilios 0 No información 1 Si 2 No menciona 3 No sabe

Tarjeta 3

124		6	Cura enfermedades 0 No información 1 Si 2 No menciona 3 No sabe
125		7	Vende medicinas 0 No información 1 Si 2 No menciona 3 No sabe
126		8	Da medicinas sin cobrar 0 No información 1 Si 2 No menciona 3 No sabe

Var.	Prog.	Columna	
127	F3	9	Letrinización 0 No información 1 Si 2 No menciona 3 No sabe
128		10	Agua Potable 0 No hubo 1 Si 2 No menciona 3 No sabe
129		11	Da alimentos 0 No información 1 Si 2 No menciona 3 No sabe
130		12	Da vacunas 0 No información 1 Si 2 No menciona 3 No sabe
131		13	Muertos 0 No información 1 Si 2 No menciona 3 No sabe
132		14	Participación en reuniones comunales 0 No información 1 Si 2 No menciona 3 No sabe
133		15	Otras actividades _____ 0 No información 1 Si 2 No menciona 3 No sabe
134		16	No sabe que hace el Promotor 0 No información 1 Si 2 No menciona 3 No sabe

Var.	Preg.	Columna	
135	P4	17	Enseñanza del Promotor salud o nuevo consuro 0 No información 1 Si 2 No 3 No sabe
136	P5	18	Promoción de Plan Familiar por el Promotor 0 No información 1 Si 2 No 3 No sabe
137	P1	19	Servicios del Promotor durante el año pasado Consulta 0 No información 1 Si 2 No
138		20	Medicinas 0 No información 1 Si 2 No
139		21	Primeros auxilios 0 No información 1 Si 2 No
140		22	Ayuda al parto 0 No información 1 Si 2 No
141		23	Inyecciones 0 No información 1 Si 2 No
142		24	Materiales para planificación familiar 0 No información 1 Si 2 No

Var.	Preg.	Columna	
143	31	25	Otro _____ 0 No información 1 Si 2 No
144		26	Otro _____ 0 No información 1 Si 2 No
145		27	Ninguno 0 No información 1 Si 2 No
			0001 - Gratis 8888 - Pagó pero no sabe cuánto
	12		Pagos para el servicio de Promotor Nota: quita la última cifra
146		28 29 30 31	Consulta soles
147		32 33 34 35	Medicinas _____ soles
148		36 37 38 39	Medicinas _____ soles
149		40 41 42 43	Medicinas _____ soles
150		44 45 46 47	Medicinas _____ soles
151		48 49 50 51	Medicinas _____
152		52 53 54 55	Primeros Auxilios _____ soles
153		56 57 58 59	Primeros Auxilios _____ soles

Tarjeta 3

Var.	Frec.	Columna	
154	12	60 61 62 63	Primeros Auxilios _____ solos
155		64 65 66 67	Ayuda al parto solos
156		68 69 70 71	aterial para pat. responsable solos
157		72 73 74 75	Otro _____ solos
158		76 77 78 79	Otro _____ solos
159	03	80	Tipo de transporte para ir al Promotor 0 No información 1 Pie 2 Movilidad 3 Mula 4 Bicicleta 5 Moto 6 7

Tarjeta 4

Var.	Frec.	Columna	
160	14	6 7 8 9 horas min	Tiempo llegar al Promotor Horas Minutos
161	15	10	Definición de botiquin comunal 0 No informacion 1 Medic. para primeros auxilios 2 Un cajón con medicamentos 3 Donde hay medic. para la comunidad 4 Parecido a la farmacia 5 Donde hay remedios completos 6 Medicamentos del Promotor 7 Medicina a bajo precio 8 No sabe 9 No aplicable

Var.	Pre.	Columna	
162	06	11	Botiquín comunal en la Comunidad 0 No información 1 Si 2 No 3 No sabe
163	07	12 13 14 15 años meses	Tiempo de tener botiquín años y meses
164	08	16	Uso de botiquín por el informante 0 No información 1 Si 2 No
165	09	17	Razón por cerrar el botiquín 0 No información 1 No sabe 2 Falta de dinero 3 Falta de medicinas 4 5 6 7 8 9 No aplicable
166	010	18	Compra de medicinas durante el mes pasado Puesto de salud 0 No información 1 Si 2 No
167		19	Centro de salud 0 No información 1 Si 2 No
168		20	Hospital local 0 No información 1 Si 2 No

Var.	Preg.	Columna	
169	110	21	Hospital regional 0 No información 1 Si 2 No
170		22	Codoga 0 No información 1 Si 2 No
171		23	Botiquín comunal 0 No información 1 Si 2 No
172		24	Farmacia 0 No información 1 Si 2 No
173		25	Otro _____ 0 No información 1 Si 2 No
174		26	Otro _____ 0 No información 1 Si 2 No

Instrucciones para ver 175 al 191

G o gratis marque 0001

S pagaron pero no se acuerda la cantidad 8888

No anote la última cifra

	111		Costo de medicinas en la última visita
175		27 28 29 30	Puesto de salud soles
176		31 32 33 34	Transporte soles
177		35 36 37 38	Centro de salud soles

Tarjeta 4

Var.	Proc.	Columna		
178	011	39 40 41 42	Transporte	soles
179		43 44 45 46	Hospital local	soles
180		47 48 49 50	Transporte	soles
181		51 52 53 54	Hospital regional	soles
182		55 56 57 58	Transporte	soles
183		59 60 61 62	Bodega	soles
184		63 64 65 66	Transporte	soles
185		67 68 69 70	Botiquin comunal	soles
186		71 72 73 74	Transporte	soles
187		75 76 77 78	Farmacia	soles

Tarjeta 5

Var.	Proc.	Columna		
188		6 7 8 9	Transporte	soles
189	011	10 11 12 13	Otro _____	
190		14 15 16 17	Transporte	
191	01	18	Actividades del Promotor ha mejorado 0 No información 1 Si 2 No 3 No sabe	
	02		Sentido de mejora del Promotor	
192		19	Instalación de agua potable 0 No información 1 Si 2 No menciona	
193		20	Instalación de letrinas 0 No información 1 Si 2 No menciona	

Var.	Frec.	Columna	
194	H2	21	Cuenta con persona para atender urgencias 0 No información 1 Si 2 No menciona
195		22	Auxilio inmediato 0 No información 1 Si 2 No menciona
196		23	Niños reciben vacunas 0 No información 1 Si 2 No menciona
197		24	Niños enferman y mueren menos 0 No información 1 Si 2 No menciona
198		25	Disminuido diarreas 0 1 2
199		26	Comunidad informada 0 1 2
200		27	Ayuda sobre pat. responsable 0 1 2
201		28	Madres mueren menos 0 1 2
202		29	Transferencias; atiende en PJ o CS 0 1 2

54''

Var.	Preg.	Columna	
203	112	30	Comunidad tiene medicinas 0 1 2
204		31	Comunidad participa en act. de salud 0 1 2
205		32	Otro _____ 0 1 2
206		33	Otro _____ 0 1 2
207	113	34	Qué hacer para que el promotor ayude mejor 0 No información 1 Más capacitación 2 Pagarle 3 Más equipo 4 Más tiempo 5 Otra persona 6 7 8 9
208	114	35 36	Problemas más importantes de la comunidad 0 No información 1 Económicos 2 Falta de caminos 3 Falta de servicios de salud 4 Abuso de autoridades 5 Educación 6 Falta de infraestructura 7 Drogadicción, delincuencia 8 Otros 9 No aplicable

Var.	Preg.	Columna
209	H4	37

Grado de Cooperación

0	No información
1	Muy bueno
2	Bueno
3	Regular
4	Malo

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR005 POBLACION DE COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR005 MENOS DE 500 (1)	500-1000 (2)	1000-1500 (3)	1500-2000 (4)	MAS DE 2000 (5)	ROW TOTAL
PIURA-TUMBES	1	38 16.7 3.9	42 18.5 10.9	44 19.4 19.6	15 6.6 8.3	88 38.8 17.3	227 9.9
SAN MARTIN	2	249 79.3 25.3	32 10.2 8.3	2 .6 .9	12 3.8 6.6	19 6.1 3.7	314 13.8
HUANUCO-PASCO-UC	3	137 39.9 13.9	71 20.7 18.5	14 4.1 6.2	36 10.5 19.9	85 24.8 16.7	343 15.0
CALLAO	4	181 61.6 18.4	29 9.9 7.6	19 6.5 8.4	23 7.8 12.7	42 14.3 8.2	294 12.9
ICA	5	47 15.7 4.8	76 25.4 19.8	40 13.4 17.8		136 45.5 26.7	299 13.1
AREQUIPA	6	103 34.1 10.5	34 11.3 8.9	60 19.9 26.7	36 11.9 19.9	69 22.8 13.5	302 13.2
PUNO	7	92 32.9 9.4	63 22.5 16.4	45 16.1 20.0	36 12.9 19.9	44 15.7 8.6	280 12.3
ANCASH	8	136 60.7 13.8	37 16.5 9.6	1 .4 .4	23 10.3 12.7	27 12.1 5.3	224 9.8
	COLUMN TOTAL	983 43.1	384 16.8	225 9.9	181 7.9	510 22.3	2283 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
621.71088	24	0.0	17.759	NONE

NUMBER OF MISSING OBSERVATIONS = 52

VOL.II (X-Tabs)
"PRINTOUT" DE LA
COMPUTADORA,
ENCUESTA COMUNIDAD

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR007 MATERIAL DEL PISO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR007 TIERRA 1	MADERA 2	CEMENTO 3	TIERRA Y OTRO CEMENTO 4	OTRO 5	ROW TOTAL
PIURA-TUMBES	1	126 49.4 8.4	4 1.5 2.2	85 33.3 19.8	38 14.9 20.5	2 .8 8.0	255 11.0
SAN MARTIN	2	297 94.6 19.9	2 .6 1.1	12 3.8 2.8	1 .3 .5	2 .6 8.0	314 13.5
HUANUCO-PASCO-UC	3	142 41.5 9.5	142 41.5 78.0	58 17.0 13.5			342 14.8
CALLAO	4	165 55.9 11.0	20 6.8 11.0	96 32.5 22.3	8 2.7 4.3	6 2.0 24.0	295 12.7
ICA	5	66 22.1 4.4	3 1.0 1.6	122 40.9 28.4	99 33.2 53.5	8 2.7 32.0	298 12.9
AREQUIPA	6	226 73.4 15.1	2 .6 1.1	49 15.9 11.4	25 8.1 13.5	6 1.9 24.0	308 13.3
PUNO	7	265 93.0 17.7	6 2.1 3.3	2 .7 .5	12 4.2 6.5		285 12.3
ANCASH	8	209 94.6 14.0	3 1.4 1.6	6 2.7 1.4	2 .9 1.1	1 .5 4.0	221 9.5
	COLUMN TOTAL	1496 64.5	182 7.9	430 18.6	185 8.0	25 1.1	2318 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
1439.34194	28	0.0	2.384	8 OF 40 (20.0%)

NUMBER OF MISSING OBSERVATIONS = 27

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR009 SEXO DEL INFORMANTE

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR009 HOMBRE (1)	VAR009 MUJER (2)	ROW TOTAL
PIURA-TUMBES	1	73	181	254
		28.7	71.3	11.0
		8.3	12.6	
SAN MARTIN	2	164	149	313
		52.4	47.6	13.5
		18.7	10.3	
HUANUCO-PASCO-UC	3	76	268	344
		22.1	77.9	14.9
		8.7	18.6	
CALLAO	4	73	221	294
		24.8	75.2	12.7
		8.3	15.3	
ICA	5	60	239	299
		20.1	79.9	12.9
		6.9	16.6	
AREQUIPA	6	148	157	305
		48.5	51.5	13.2
		16.9	10.9	
PUNO	7	159	127	286
		55.6	44.4	12.3
		18.2	8.8	
ANCASH	8	122	99	221
		55.2	44.8	9.5
		13.9	6.9	
	COLUMN TOTAL	875	1441	2316
		37.8	62.2	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
216.30213	7	0.0	83.495	NONE

NUMBER OF MISSING OBSERVATIONS = 29

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR010 EDAD DEL INFORMANTE

VAR001	COUNT / ROW PCT / COL PCT	VAR010 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	9 3.4 8.4	72 27.5 11.4	69 26.3 9.6	54 20.6 11.9	58 22.1 13.6	262 11.2
SAN MARTIN	2	18 5.7 16.8	103 32.7 16.3	94 29.8 13.1	46 14.6 10.1	54 17.1 12.6	315 13.5
HUANUCO-PASCO-UC	3	27 7.9 25.2	120 35.0 19.0	109 31.8 15.2	51 14.9 11.2	36 10.5 8.4	343 14.7
CALLAO	4	11 3.7 10.3	79 26.8 12.5	85 28.8 11.9	64 21.7 14.1	56 19.0 13.1	295 12.6
ICA	5	11 3.7 10.3	71 23.7 11.3	105 35.1 14.7	60 20.1 13.2	52 17.4 12.2	299 12.8
AREQUIPA	6	17 5.5 15.9	71 23.1 11.3	95 30.8 13.3	69 22.4 15.2	56 18.2 13.1	308 13.2
PUNO	7	7 2.4 6.5	69 23.9 11.0	89 30.8 12.4	59 20.4 13.0	65 22.5 15.2	289 12.4
ANCASH	8	7 3.1 6.5	45 20.2 7.1	70 31.4 9.8	51 22.9 11.2	50 22.4 11.7	223 9.6
	COLUMN TOTAL	107 4.6	630 27.0	716 30.7	454 19.5	427 18.3	2334 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
67.33411	28	0.0000	10.223	NONE

NUMBER OF MISSING OBSERVATIONS = 11

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR011 ESTADO CIVIL DEL INFORMANTE
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR011 CASADO (1)	VIUDO (2)	SOLTERO (3)	CONVIVIENTE (4)	DIVORCIADO (5)	ROW TOTAL
PIURA-TUMBES	1	216 84.4 13.6	12 4.7 10.1	15 5.9 8.8	12 4.7 2.7	1 .4 14.3	256 11.0
SAN MARTIN	2	208 66.5 13.1	11 3.5 9.2	29 9.3 17.0	65 20.8 14.9		313 13.5
HUANUCO-PASCO-UC	3	130 37.8 8.2	18 5.2 15.1	31 9.0 18.1	163 47.4 37.3	2 .6 28.6	344 14.8
CALLAO	4	218 73.9 13.7	14 4.7 11.8	18 6.1 10.5	42 14.2 9.6	3 1.0 42.9	295 12.7
ICA	5	216 72.2 13.6	15 5.4 13.4	35 11.7 20.5	32 10.7 7.3		299 12.9
AREQUIPA	6	223 72.9 14.0	15 5.2 13.4	17 5.6 9.9	49 16.0 11.2	1 .3 14.3	306 13.2
PUNO	7	217 75.3 13.7	20 6.9 16.8	13 4.5 7.6	38 13.2 8.7		288 12.4
ANCASH	8	160 72.4 10.1	12 5.4 10.1	13 5.9 7.6	36 16.3 8.2		221 9.5
	COLUMN TOTAL	1588 68.4	119 5.1	171 7.4	437 18.8	7 .3	2322 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
289.95647	28	0.0	0.666	8 OF 40 (20.0%)

NUMBER OF MISSING OBSERVATIONS = 23

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR013 HABILIDAD PARA LEER Y ESCRIBIR
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR013 SI (1)	VAR013 NO (2)	ROW TOTAL
PIURA-TUMBES	1	164 63.8 9.4	93 36.2 17.2	257 11.2
SAN MARTIN	2	201 65.7 11.5	105 34.3 19.4	306 13.3
HUANUCO-PASCO-UC	3	263 78.3 15.0	73 21.7 13.5	336 14.6
CALLAO	4	256 88.6 14.6	33 11.4 6.1	289 12.6
ICA	5	283 95.3 16.1	14 4.7 2.5	297 12.9
AREQUIPA	6	259 85.2 14.8	45 14.8 8.3	304 13.2
PUNO	7	186 65.0 10.6	100 35.0 18.5	286 12.5
ANCASH	8	141 64.1 8.0	79 35.9 14.5	220 9.6
	COLUMN TOTAL	1753 76.4	542 23.5	2295 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
177.19236	7	0.0	51.956	NONE

NUMBER OF MISSING OBSERVATIONS = 50

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR014 GRADO DE ESCOLARIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR014 1 NINGUNO	2 DE PRIMARIA	5 TO PRIMARIA	1-2 SECUNDARIA	MAS	ROW TOTAL
		1	2	3	4	5	
PIURA-TUMBES	1	59	73	56	18	12	218
		27.1	33.5	25.7	8.3	5.5	10.9
		23.9	12.2	7.3	7.1	8.3	
SAN MARTIN	2	22	99	86	10	5	222
		9.9	44.6	38.7	4.5	2.3	11.1
		8.9	16.5	11.3	4.0	3.4	
HUANUCO-PASCO-JC	3	40	87	127	27	26	307
		13.0	28.3	41.4	8.8	8.5	15.3
		16.2	14.5	16.7	10.7	17.9	
CALLAO	4	22	60	124	51	27	284
		7.7	21.1	43.7	18.0	9.5	14.2
		8.9	10.0	16.2	20.2	18.6	
ICA	5	10	32	123	76	44	292
		3.4	13.3	42.1	26.0	15.1	14.5
		4.0	5.5	16.1	30.2	30.3	
AREQUIPA	6	22	83	118	38	26	284
		7.7	29.2	41.5	13.4	9.2	14.2
		8.9	13.8	15.4	15.1	17.9	
PUNO	7	46	74	81	27	4	232
		19.8	31.9	34.9	11.6	1.7	11.6
		18.6	12.4	10.6	10.7	2.8	
ANCASH	8	26	87	49	5	1	168
		15.5	51.8	29.2	3.0	.6	8.4
		10.5	14.5	6.4	2.0	.7	
	COLUMN TOTAL	247	593	764	252	145	2007
		12.3	29.5	38.1	12.6	7.2	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
314.27265	24	0.0	12.138	NONE

NUMBER OF MISSING OBSERVATIONS = 338

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR020 IDIOMA PRINCIPAL DE LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR020 CASTELLANO (1)	QUECHUA (2)	AYMARA (3)	AGUARUNA (4)	SHIPIVO (5)	OTRO 2. (7)	ROW TOTAL
PIURA-TUMBES	1	252 97.3 14.2	4 1.5 1.1	3 1.2 2.4				259 11.2
SAN MARTIN	2	284 90.2 16.0	9 2.9 2.5	1 .3 .8	20 6.3 100.0		1 .3 100.0	315 13.6
HUANUCO-PASCO-UC	3	291 85.3 16.4	4 1.2 1.1			46 13.5 100.0		341 14.7
CALLAO	4	292 99.7 16.4	1 .3 .3					293 12.6
ICA	5	298 100.0 16.8						298 12.9
AREQUIPA	6	233 76.4 13.1	69 22.6 19.7	3 1.0 2.4				305 13.2
PUNO	7	57 19.9 3.2	113 39.5 32.2	116 40.6 94.3				286 12.3
ANCASH	8	69 31.4 3.9	151 68.6 43.0					220 9.5
	COLUMN TOTAL	1776 76.7	351 15.1	123 5.3	20 .9	46 2.0	1 .0	2317 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
2143.52036	35	0.0000	0.095	17 OF 48 (35.4%)

NUMBER OF MISSING OBSERVATIONS = 28

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR021 OTRO IDIOMA EN LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR021 NINGUNO 1	QUECHUA 2	AYMARA 3	AGUARUNA 4	SHIPIVO 5	OTRO 6	OTRO 7	ROW TOTAL
PIURA-TUMBES	1		3 30.0 .3	5 50.0 3.7	1 10.0 5.0	1 10.0 1.6			10 .6
SAN MARTIN	2	41 23.0 10.4	114 64.0 11.5		18 10.1 90.0		4 2.2 6.3	1 .6 50.0	178 10.6
HUANUCO-PASCO-UC	3	88 29.5 22.2	138 46.3 13.9	3 1.0 2.2		54 18.1 87.1	15 5.0 23.4		298 17.8
CALLAO	4	80 38.8 20.2	100 48.5 10.1	2 1.0 1.5			24 11.7 37.5		206 12.3
ICA	5	99 46.7 25.0	74 35.4 7.4	7 3.3 5.1	1 .5 5.0	6 2.8 9.7	20 9.4 31.3	1 .5 50.0	212 12.7
AREQUIPA	6	48 18.3 12.1	211 80.5 21.2	2 .8 1.5		1 .4 1.6			262 15.6
PUNO	7	21 7.4 5.3	149 52.4 15.0	114 40.0 83.8			1 .4 1.6		285 17.0
ANCASH	8	19 8.5 4.8	202 90.2 20.3	3 1.3 2.2					224 13.4
	COLUMN TOTAL	396 23.6	995 59.4	136 8.1	20 1.2	62 3.7	64 3.8	2 .1	1675 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
1121.19659	42	0.0000	0.012	20 OF 56 (35.7%)

NUMBER OF MISSING OBSERVATIONS = 670

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR022 TIEMPO DE VIVIR EN LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR022 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	15	26	29	40	148	258
		5.8	10.1	11.2	15.5	57.4	11.1
		25.4	7.5	6.6	9.1	14.3	
SAN MARTIN	2	28	115	39	43	88	314
		8.9	36.6	12.4	13.7	28.0	13.6
		47.5	33.4	8.9	9.8	8.5	
HUANUCO-PASCO-UC	3	7	80	115	96	41	339
		2.1	23.6	33.9	28.3	12.1	14.6
		11.9	23.3	26.1	21.9	4.0	
CALLAO	4	2	33	91	60	118	294
		.7	11.2	27.6	20.4	40.1	12.7
		3.4	9.6	18.4	13.7	11.4	
ICA	5	2	33	78	64	122	299
		.7	11.0	26.1	21.4	40.8	12.9
		3.4	9.6	17.7	14.6	11.8	
AREQUIPA	6	2	32	39	49	184	306
		.7	10.5	12.7	16.0	60.1	13.2
		3.4	9.3	8.9	11.2	17.7	
PUNO	7	3	15	40	47	178	283
		1.1	5.3	14.1	16.6	62.9	12.2
		5.1	4.4	9.1	10.7	17.2	
ANCASH	8		3	19	39	158	224
			3.5	8.5	17.4	70.5	9.7
			2.3	4.3	8.9	15.2	
	COLUMN TOTAL	59	343	440	438	1037	2317
		2.5	14.8	19.0	18.9	44.8	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
558.25562	24	0.0	5.704	NONE

NUMBER OF MISSING OBSERVATIONS = 28

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR023 TRABAJO PRINCIPAL

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR023 1. AGRIC-CO INSUMO PR	2. AGRICULT . COMERC	3. INDEPEND IENT-	4. AMA DE C ASA	5. TRABAJ.N O ASALAR E	6. AMBULANT	7. OTROS 1.	8. OTROS 2.	ROW TOTAL
PIURA-TUMBES	1	80	20	22	96	1	3	29	2	253
		31.6	7.9	8.7	37.9	.4	1.2	11.5	.8	11.1
		8.0	6.8	13.8	16.4	10.0	13.6	14.1	18.2	
SAN MARTIN	2	226	41	3	30	3		9	1	313
		72.2	13.1	1.0	9.6	1.0		2.9	.3	13.7
		22.5	14.0	1.9	5.1	30.0		4.4	9.1	
HUANUCO-PASCO-UC	3	88	84	30	107	4	4	20	2	339
		26.0	24.8	8.8	31.6	1.2	1.2	5.9	.6	14.8
		8.8	28.8	18.8	18.3	40.0	18.2	9.8	18.2	
CALLAO	4	66	59	25	89		9	38	3	289
		22.8	20.4	8.7	30.8		3.1	13.1	1.0	12.6
		6.6	20.2	15.6	15.2		40.9	18.5	27.3	
ICA	5	3	9	35	179	1	4	63		294
		1.0	3.1	11.9	60.9	.3	1.4	21.4		12.8
		.3	3.1	21.9	30.5	10.0	18.2	30.7		
AREQUIPA	6	170	25	15	59		2	26	3	301
		56.5	8.5	5.0	19.6		.7	8.6	1.0	13.1
		16.9	8.9	9.4	10.1		9.1	12.7	27.3	
PUNO	7	251	3	8	8	1		11		282
		89.0	1.1	2.8	2.8	.4		3.9		12.3
		25.0	1.0	5.0	1.4	10.0		5.4		
ANCASH	8	119	50	22	18			9		218
		54.6	22.9	10.1	8.3			4.1		9.5
		11.9	17.1	13.8	3.1			4.4		
	COLUMN TOTAL	1003	292	160	586	10	22	205	11	2289
		43.8	12.8	7.0	25.6	.4	1.0	9.0	.5	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
975.56531	49	0.0000	0.952	24 OF 64 (37.5%)

NUMBER OF MISSING OBSERVATIONS = 56

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR024 DISTANCIA PUESTO DE SALUD MAS CERCANO

VAR001	COUNT / ROW PCT / COL PCT	VAR024 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	73 32.3 20.3	107 47.3 13.7	39 17.3 16.1	4 1.8 2.7	3 1.3 5.2	226 14.2
SAN MARTIN	2	19 9.7 5.3	106 54.1 13.5	44 22.4 18.2	16 8.2 10.9	11 5.6 19.0	196 12.4
HUANUCO-PASCO-UC	3	6 3.1 1.7	30 15.5 3.9	66 34.2 27.3	85 44.0 57.8	6 3.1 10.3	193 12.2
CALLAO	4	2 1.7 .6	75 63.0 9.6	22 18.5 9.1	12 10.1 8.2	7 5.9 12.1	119 7.5
ICA	5	137 47.1 38.1	130 44.7 16.7	17 5.8 7.0	3 1.0 2.0	4 1.4 6.9	291 18.3
AREQUIPA	6	66 33.2 18.3	125 62.8 16.0	3 1.5 1.2	4 2.0 2.7	1 .5 1.7	199 12.5
PUNO	7	57 22.4 15.8	171 67.3 22.0	19 7.5 7.9	6 2.4 4.1	1 .4 1.7	254 16.0
ANCASH	8		34 31.5 4.4	32 29.6 13.2	17 15.7 11.6	25 23.1 43.1	108 6.9
	COLUMN TOTAL	360 22.7	779 49.1	242 15.3	147 9.3	58 3.7	1586 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
845.74471	28	0.0	3.950	2 OF 40 (5.0%)

NUMBER OF MISSING OBSERVATIONS = 759

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR025 TIEMPO PARA LLEGAR AL PUESTO DE SALUD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR025 1	2	3	4	5	6	ROW TOTAL
PIURA-TUMBES	1	52 24.8 11.6	76 35.2 11.7	42 20.0 8.7	36 17.1 25.7	3 1.4 8.6	1 .5 4.8	210 11.8
SAN MARTIN	2	25 10.8 5.6	79 34.1 12.2	88 37.9 18.2	31 13.4 22.1	7 3.0 20.0	2 .9 9.5	232 13.1
HUANUCO-PASCO-UC	3	68 24.9 15.2	79 28.9 12.2	85 31.1 17.6	38 13.9 27.1	1 .4 2.9	2 .7 9.5	273 15.4
CALLAO	4	4 3.3 .9	58 47.2 9.0	55 44.7 11.4	5 4.1 3.6		1 .8 4.8	123 6.9
ICA	5	132 45.5 29.5	125 43.1 19.3	29 10.0 6.0	2 .7 1.4	1 .3 2.9	1 .3 4.8	290 16.3
AREQUIPA	6	76 36.2 17.0	84 41.0 13.5	34 16.2 7.0	2 1.0 1.4	4 1.9 11.4	6 2.9 28.6	210 11.8
PUNO	7	45 18.2 10.1	95 38.5 14.7	92 37.2 19.0	8 3.2 5.7	2 .8 5.7	5 2.0 23.8	247 13.9
ANCASH	8	45 23.8 10.1	47 24.9 7.3	59 31.2 12.2	18 9.5 12.9	17 9.0 48.6	3 1.6 14.3	189 10.7
	COLUMN TOTAL	447 25.2	647 36.5	484 27.3	140 7.9	35 2.0	21 1.2	1774 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
362.56599	35	0.0000	1.456	14 OF 48 (29.2%)

NUMBER OF MISSING OBSERVATIONS = 571

09 MAY 84 E N C U E S T A D E L A C O M U N I D A D
17:35:12 UNIVERSIDAD CATOLICA DEL PERU IBM 4331 - L02 VM/SP 8206

CROSSTABULATION OF
VAR001 REGION DE SALUD BY VAR026 DISTANCIA AL CENTRO DE SALUD MAS CERC.
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR026 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	22 10.3 14.8	139 65.3 22.3	37 17.4 10.1	8 3.8 2.6	7 3.3 3.6	213 13.0
SAN MARTIN	2	1 .5 .7	83 45.6 13.3	64 35.2 17.5	21 11.5 6.8	13 7.1 6.6	182 11.1
HUANUCO-PASCO-UC	3	14 6.8 9.4	39 18.8 6.3	12 5.8 3.3	58 28.0 18.7	84 40.6 42.9	207 12.6
CALLAO	4	51 23.3 34.2	94 42.9 15.1	37 16.9 10.1	21 9.6 6.8	16 7.3 8.2	219 13.3
ICA	5	18 6.6 12.1	112 41.3 18.0	85 31.4 23.2	48 17.7 15.5	8 3.0 4.1	271 16.5
AREQUIPA	6	26 10.4 17.4	50 20.1 8.0	51 24.5 16.7	80 32.1 25.8	32 12.9 16.3	249 15.2
PUNO	7	16 8.4 10.7	78 40.8 12.5	24 12.6 6.6	52 27.2 16.8	21 11.0 10.7	191 11.6
ANCASH	8	1 .9 .7	27 24.3 4.3	46 41.4 12.6	22 19.8 7.1	15 13.5 7.7	111 6.8
	COLUMN TOTAL	149 9.1	622 37.9	366 22.3	310 18.9	196 11.9	1643 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
513.03042	28	0.0	10.066	NONE

NUMBER OF MISSING OBSERVATIONS = 702

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR027 TIEMP EN LLEGAR AL CENTR.SAL. MAS CERC

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1	2	3	4	5	6	ROW TOTAL
PIURA-TUMBES	1	3 1.6 1.5	87 45.5 14.3	85 44.5 11.5	12 6.3 4.2		4 2.1 13.8	191 10.0
SAN MARTIN	2	12 4.1 6.0	83 28.1 13.7	121 41.0 16.4	58 19.7 20.4	17 5.8 36.2	4 1.4 13.8	295 15.5
HUANUCO-PASCO-UC	3	76 26.2 38.2	74 25.5 12.2	45 15.5 6.1	94 32.4 33.1		1 .3 3.4	290 15.2
CALLAO	4	39 14.9 19.6	109 41.6 17.9	74 28.2 10.0	22 8.4 7.7	15 5.7 31.9	3 1.1 10.3	262 13.7
ICA	5	33 12.1 16.6	125 46.0 20.5	107 39.3 14.5	3 1.1 1.1	3 1.1 6.4	1 .4 3.4	272 14.3
AREQUIPA	6	19 7.8 9.5	69 28.2 11.3	110 44.9 14.9	32 13.1 11.3	4 1.6 8.5	11 4.5 37.9	245 12.9
PUNO	7	13 6.9 6.5	38 20.1 6.3	103 54.5 13.9	33 17.5 11.6		2 1.1 6.9	189 9.9
ANCASH	8	4 2.5 2.0	23 14.2 3.8	94 58.0 12.7	30 18.5 10.6	8 4.9 17.0	3 1.9 10.3	162 8.5
	COLUMN TOTAL	199 10.4	608 31.9	739 38.8	284 14.9	47 2.5	29 1.5	1906 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
446.88232	35	0.0000	2.465	11 OF 48 (22.9%)

NUMBER OF MISSING OBSERVATIONS = 439

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR028 DISP.DE SERVICIOS DE SALUD EN COMUNIDA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR028 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	180	63	8	251
		71.7	25.1	3.2	11.0
		10.3	13.7	11.6	
SAN MARTIN	2	188	97	16	301
		62.5	32.2	5.3	13.2
		10.8	21.0	23.2	
HUANUCO-PASCO-UC	3	255	72	15	342
		74.6	21.1	4.4	15.1
		14.6	15.6	21.7	
CALLAO	4	190	92	5	287
		66.2	32.1	1.7	12.6
		10.9	20.0	7.2	
ICA	5	278	15	4	297
		93.6	5.1	1.3	13.1
		16.0	3.3	5.8	
AREQUIPA	6	237	63	2	302
		78.5	20.9	.7	13.3
		13.6	13.7	2.9	
PUNO	7	241	24	9	278
		86.7	10.1	3.2	12.2
		13.8	5.1	13.0	
ANCASH	8	173	31	10	214
		80.8	14.5	4.7	9.4
		9.9	6.7	14.5	
	COLUMN TOTAL	1742	461	69	2272
		76.7	20.3	3.0	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
143.09196	14	0.0000	6.499	NONE

NUMBER OF MISSING OBSERVATIONS = 73

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR029 TIPO DE SERVICIOS DE SALUD PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR029 1 CENTRO MEDICO	2 PROMOTOR DE SALU	3 PARTERA TRADICIO	4 HUESERO	5 CONSULT. MED.PART	6 BOTIQUIN COMUNAL	ROW TOTAL
PIURA-TUMBES	1	89 49.7 9.5	86 48.0 10.8			2 1.1 66.7	2 1.1 5.3	179 9.9
SAN MARTIN	2	12 6.0 1.3	161 80.9 20.2	2 1.0 6.9			24 12.1 63.2	199 11.0
HUANUCO-PASCO-UC	3	112 39.3 12.0	166 58.2 20.8	7 2.5 24.1				285 15.8
CALLAO	4	120 62.2 12.9	65 33.7 8.2	1 .5 3.4			7 3.6 18.4	193 10.7
ICA	5	148 53.4 15.8	123 44.4 15.4	4 1.4 13.8	1 .4 100.0	1 .4 33.3		277 15.4
AREQUIPA	6	175 70.9 18.7	69 27.9 8.7	3 1.2 10.3				247 13.7
PUNO	7	14 6.5 1.5	90 37.7 11.3	2 .8 6.9				239 13.2
ANCASH	8	133 71.9 14.2	37 20.0 4.5	10 5.4 34.5			5 2.7 13.2	185 10.3
	COLUMN TOTAL	936 51.9	797 44.2	29 1.6	1 .1	3 .2	38 2.1	1804 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
410.56815	35	0.0000	0.099	28 OF 48 (58.3%)

NUMBER OF MISSING OBSERVATIONS = 541

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR030 PROMOTOR DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR030 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	212 88.3 11.3	19 7.9 7.0	9 3.8 9.0	240 10.7
SAN MARTIN	2	283 93.1 15.1	16 5.3 5.9	5 1.6 5.0	304 13.5
HUANUCO-PASCO-UC	3	282 83.4 15.0	51 15.1 18.9	5 1.5 5.0	338 15.1
CALLAO	4	237 84.3 12.6	38 13.5 14.0	6 2.1 6.0	281 12.5
ICA	5	190 65.7 10.1	46 15.9 17.0	53 18.3 53.0	289 12.9
AREQUIPA	6	246 82.0 13.1	42 14.0 15.5	12 4.0 12.0	300 13.4
PUNO	7	236 84.1 12.7	40 14.1 14.8	5 1.8 5.0	283 12.6
ANCASH	8	186 88.6 9.9	19 9.0 7.0	5 2.4 5.0	210 9.4
	COLUMN TOTAL	1874 83.5	271 12.1	100 4.5	2245 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
188.49921	14	0.0	9.354	NONE

NUMBER OF MISSING OBSERVATIONS = 100

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR033 PARTERA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR033 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	181 85.4 12.5	30 14.2 6.5	1 .5 1.5	212 10.7
SAN MARTIN	2	215 96.0 14.9	9 4.0 1.9		224 11.3
HUANUCO-PASCO-UC	3	234 68.8 16.2	78 22.9 16.9	28 8.2 41.8	340 17.2
CALLAO	4	157 56.1 10.9	116 41.4 25.1	7 2.5 10.4	280 14.2
ICA	5	90 48.1 6.2	84 44.9 18.2	13 7.0 19.4	187 9.5
AREQUIPA	6	248 91.2 17.2	18 6.6 3.9	6 2.2 9.0	272 13.8
PUNO	7	141 55.7 9.8	103 40.7 22.3	9 3.6 13.4	253 12.8
ANCASH	8	180 87.0 12.4	24 11.6 5.2	3 1.4 4.5	207 10.5
	COLUMN TOTAL	1446 73.2	462 23.4	67 3.4	1975 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
320.94570	14	0.0	6.344	NONE

NUMBER OF MISSING OBSERVATIONS = 370

565

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR036 BOTIQUIN COMUNAL

PAGE 1 OF 1

VAR001	VAR036 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
1 PIURA-TUMBES	56 37.8 11.9	82 55.4 7.4	10 6.8 9.9	148 8.8
2 SAN MARTIN	63 47.7 13.4	69 52.3 6.2		132 7.9
3 HUANUCO-PASCO-UC	81 25.5 17.3	197 61.9 17.8	40 12.6 39.6	318 19.0
4 CALLAO	57 21.0 12.2	195 72.3 17.7	18 6.6 17.8	271 16.2
5 ICA	39 22.9 8.3	122 71.8 11.0	9 5.3 8.9	170 10.1
6 AREQUIPA	33 15.9 7.0	165 79.7 14.9	9 4.3 8.9	207 12.4
7 PUNO	21 8.9 4.5	209 88.2 18.9	7 3.0 6.9	237 14.1
8 ANCASH	119 61.7 25.4	65 33.7 5.9	8 4.1 7.9	193 11.5
COLUMN TOTAL	469 28.0	1105 66.0	101 6.0	1676 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
249.97768	14	0.0	7.955	NONE

NUMBER OF MISSING OBSERVATIONS = 669

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR037 CURANDERO
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR037 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	48	97	8	153
		31.4	63.4	5.2	9.0
		6.2	11.9	7.8	
SAN MARTIN	2	72	56		128
		56.3	43.8		7.6
		9.3	6.8		
HUANUCO-PASCO-UC	3	104	180	45	329
		31.6	54.7	13.7	19.4
		13.5	22.0	44.1	
CALLAO	4	74	179	13	266
		27.8	67.3	4.9	15.7
		9.6	21.9	12.7	
ICA	5	67	105	10	183
		36.6	57.3	5.5	10.8
		8.7	12.9	9.8	
AREQUIPA	6	184	59	18	261
		70.5	22.6	6.9	15.4
		23.8	7.2	17.6	
PUNO	7	159	81	6	246
		64.6	32.9	2.4	14.5
		20.6	9.9	5.9	
ANCASH	8	64	61	2	127
		50.4	48.0	1.6	7.5
		8.3	7.4	2.0	
	COLUMN TOTAL	772	819	102	1693
		45.6	48.4	6.0	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
233.25316	14	0.0	7.652	NONE

NUMBER OF MISSING OBSERVATIONS = 652

CROSSTABULATION OF
VAR001 REGION DE SALUD BY VAR038 MUESERO
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR038 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	109 63.0 13.6	61 35.3 7.5	3 1.7 2.5	173 10.0
SAN MARTIN	2	90 65.7 11.2	47 34.3 5.8		137 7.9
HUANUCO-PASCO-UC	3	112 34.6 14.0	165 50.9 20.4	47 14.5 38.5	324 18.7
CALLAO	4	109 38.7 13.6	163 57.8 20.1	10 3.5 8.2	282 16.3
ICA	5	62 33.7 7.7	109 59.2 13.5	13 7.1 10.7	184 10.6
AREQUIPA	6	133 48.2 16.6	103 37.3 12.7	40 14.5 32.8	276 15.9
PUNO	7	101 44.9 12.6	118 52.4 14.5	6 2.7 4.9	225 13.0
ANCASH	8	86 64.7 10.7	44 33.1 5.4	3 2.3 2.5	133 7.7
	COLUMN TOTAL	802 46.3	810 46.7	122 7.0	1734 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
166.77182	14	0.0	9.358	NONE

NUMBER OF MISSING OBSERVATIONS = 611

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR039 VERBATERO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR039 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	24 18.0 6.5	97 72.9 9.6	12 9.0 13.2	133 9.1
SAN MARTIN	2	15 21.7 4.1	54 78.3 5.3		69 4.7
HUANUCO-PASCO-UC	3	65 22.4 17.7	193 66.5 19.1	32 11.0 35.2	290 19.7
CALLAO	4	33 13.5 9.0	201 82.0 19.9	11 4.5 12.1	245 16.7
ICA	5	10 6.6 2.7	139 91.4 13.7	3 2.0 3.3	152 10.3
AREQUIPA	6	116 47.2 32.2	110 44.0 10.9	22 8.8 24.2	250 17.0
PUNO	7	87 41.6 23.7	116 55.5 11.5	6 2.9 6.6	209 14.2
ANCASH	8	15 12.4 4.1	101 83.5 10.0	5 4.1 5.5	121 8.2
	COLUMN TOTAL	367 25.0	1011 68.8	91 6.2	1469 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
197.74779	14	0.0	4.274	1 OF 24 (4.2%)

NUMBER OF MISSING OBSERVATIONS = 876

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR043 DEFIN. PROMOTOR DE SALUD
PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR043: 1 VENDEDORES MEDICINAS	2 PRESTAMISTAS RV.PRIM.	3 PRESTAMISTAS IM.AJAXIL	4 PERSONA TRAB. PO	5 PERSONA ATENDIDO N O	6 SANITARI	7	8 DESCON.NUNCA ESC	ROW TOTAL
PIURA-TUMBES	1	2	68	94	8	1	4		61	238
		.8	28.6	39.5	3.4	.4	1.7		25.6	10.8
		3.3	9.5	14.2	8.8	6.3	20.0		9.7	
SAN MARTIN	2	8	87	73	3		5		109	285
		2.8	30.5	25.6	1.1		1.8		38.2	13.0
		13.3	12.2	11.0	3.3		25.0		17.2	
HUANUCO-PASCO-JC	3	7	95	68	11	2	4	2	108	317
		2.2	30.0	27.8	3.5	.6	1.3	.6	34.1	14.4
		11.7	13.3	13.3	12.1	12.5	20.0	100.0	17.1	
CALLAO	4	2	104	101	14	7	1		56	285
		.7	36.5	35.4	4.9	2.5	.4		19.6	13.0
		3.3	14.5	15.2	15.4	43.8	5.0		8.9	
ICA	5	2	87	93	28	1			81	292
		.7	29.8	31.8	9.6	.3			27.7	13.3
		3.3	12.2	14.0	30.8	6.3			12.8	
AREQUIPA	6	6	117	73	8	2			90	296
		2.0	39.5	24.7	2.7	.7			30.4	13.5
		10.0	16.4	11.0	8.8	12.5			14.2	
PUNO	7	5	84	67	9		6		104	275
		1.8	30.5	24.4	3.3		2.2		37.8	12.5
		8.3	11.7	10.1	9.9		30.0		16.5	
ANCASH	8	28	73	75	10	3			23	212
		13.2	34.4	35.4	4.7	1.4			10.8	9.6
		46.7	10.2	11.3	11.0	18.8			3.6	
	COLUMN TOTAL	60	715	664	91	16	20	2	632	2200
		2.7	32.5	30.2	4.1	.7	.9	.1	28.7	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
259.57364	49	0.0000	0.193	24 OF 64 (37.5%)

NUMBER OF MISSING OBSERVATIONS = 145

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR047 SEXO DEL PROMOTOR EN LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR047 HOMBRE (1)	MUJER (2)	HOMBRE Y MUJER (3)	ROW TOTAL
PIURA-TUMBES	1	134 59.0 10.5	93 41.0 12.9		227 11.3
SAN MARTIN	2	249 87.7 19.5	34 12.0 4.7	1 .4 12.5	284 14.1
HUANUCO-PASCO-UC	3	192 64.0 15.1	108 36.0 14.9		300 14.9
CALLAO	4	91 33.7 7.1	179 66.3 24.5		270 13.4
ICA	5	15 7.1 1.2	192 90.6 26.3	5 2.4 62.5	212 10.5
AREQUIPA	6	196 71.5 15.4	75 27.7 10.4	2 .7 25.0	274 13.6
PUNO	7	221 90.6 17.3	23 9.4 3.2		244 12.1
ANCASH	8	176 88.0 13.8	24 12.0 3.3		200 9.9
	COLUMN TOTAL	1274 63.4	729 36.3	8 .4	2011 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
621.17528	14	0.0	0.796	8 OF 24 (33.3%)

NUMBER OF MISSING OBSERVATIONS = 334

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR048 EL SEXO PREFERIDO DEL PROMOTOR

VAR001	COUNT / ROW PCT / COL PCT	VAR048 HOMBRE (1)	MUJER (2)	(3)	ROW TOTAL
PIURA-TUMBES	1	127 50.4 11.1	104 41.3 11.1	21 8.3 14.5	252 11.4
SAN MARTIN	2	204 68.7 17.9	78 26.3 8.3	15 5.1 10.3	297 13.4
HUANUCO-PASCO-UC	3	195 60.6 17.1	115 35.7 12.4	11 3.4 7.6	322 14.5
CALLAO	4	81 27.9 7.1	195 67.2 20.9	14 4.8 9.7	290 13.1
ICA	5	50 18.1 4.4	200 72.2 21.4	27 9.7 18.6	277 12.5
AREQUIPA	6	154 51.2 13.5	122 40.5 13.1	25 8.3 17.2	301 13.6
PUNO	7	184 69.7 16.1	69 26.1 7.4	11 4.2 7.6	264 11.9
ANCASH	8	146 67.6 12.8	49 22.7 5.3	21 9.7 14.5	216 9.7
	COLUMN TOTAL	1141 51.4	933 42.0	145 6.5	2219 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
320.94328	14	0.0	14.114	NONE

NUMBER OF MISSING OBSERVATIONS = 126

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR049 RAZ.PARA QUE EL PROM.SEA HOMB. O MUJER

VAR001	COUNT / ROW PCT / COL PCT	VAR049 1 M.SABE MAS, DA P	2 M.PUEDE SALIR NO	3 M.MAS FUERTE, AU	4 M.ES MAS RESPONS	5 M.DA MAS CONFIAN	6 M.TRATA MEJOR CO	7 LOS DOS SEXOS	8 NO IMPORTA	ROW TOTAL
PIURA-TUMBES	1	36 15.2 12.0	43 18.1 6.9	35 14.8 19.4	30 12.7 16.7	58 24.5 9.0	6 2.5 9.0	9 3.8 17.0	20 8.4 14.5	237 10.8
SAN MARTIN	2	59 19.9 19.6	121 40.9 19.3	19 6.4 10.6	12 4.1 6.7	60 20.3 9.3	2 .7 3.0	6 2.0 11.3	17 5.7 12.3	296 13.5
HUANUCO-PASCO-UC	3	36 11.7 12.0	113 36.6 18.0	27 8.7 15.0	20 6.5 11.1	82 26.5 12.8	9 2.9 13.4	10 3.2 18.9	12 3.9 8.7	309 14.1
CALLAO	4	34 11.7 11.3	39 13.4 6.2	13 4.5 7.2	34 11.7 18.9	147 50.7 22.9	7 2.4 10.4	3 1.0 5.7	13 4.5 9.4	290 13.2
ICA	5	24 8.5 8.0	17 5.9 2.7	18 6.4 10.0	44 15.7 24.4	132 47.0 20.5	13 4.6 19.4	9 3.2 17.0	24 8.5 17.4	281 12.8
AREQUIPA	6	46 15.1 15.3	70 23.0 11.1	32 10.5 17.8	16 5.2 8.9	92 30.2 14.3	12 3.9 17.9	12 3.9 22.6	25 8.2 18.1	305 13.9
PUNO	7	28 10.9 9.3	125 48.5 19.9	23 8.9 12.8	14 5.4 7.8	39 15.2 6.1	17 6.6 25.4	2 .8 3.8	9 3.5 6.5	257 11.7
ANCASH	8	38 17.7 12.6	100 46.5 15.9	13 6.0 7.2	10 4.7 5.6	33 15.3 5.1	1 .5 1.5	2 .9 3.8	18 8.4 13.0	215 9.8
	COLUMN TOTAL	301 13.7	624 28.7	180 8.2	180 8.2	643 29.4	67 3.1	53 2.4	138 6.3	2190 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
427.34173	49	0.0000	5.203	NONE

NUMBER OF MISSING OBSERVATIONS = 155

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR050 CONOCIM. SOBRE QUIEN ELIGIO AL PHONOT.

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR050 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	133 55.6 11.0	51 21.3 11.7	55 23.0 10.0	239 10.9
SAN MARTIN	2	178 62.2 14.7	64 22.4 14.7	44 15.4 8.0	286 13.0
HUANUCO-PASCO-UC	3	190 61.1 15.7	71 22.8 16.3	50 16.1 9.1	311 14.1
CALLAO	4	156 56.9 12.9	34 12.4 7.8	84 30.7 15.2	274 12.5
ICA	5	78 26.2 6.4	74 24.8 17.0	146 49.0 26.4	298 13.6
AREQUIPA	6	152 50.0 12.6	77 25.3 17.7	75 24.7 13.6	304 13.8
PUNO	7	164 61.7 13.5	30 11.3 6.9	72 27.1 13.0	266 12.1
ANCASH	8	160 72.7 13.2	34 15.5 7.8	26 11.8 4.7	220 10.0
	COLUMN TOTAL	1211 55.1	435 19.8	552 25.1	2198 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
204.88596	14	0.0	43.540	NONE

NUMBER OF MISSING OBSERVATIONS = 147

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR051 PERSONA O ENT.RESP.PARA ELEGIR PROMOT.

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR051 1 COMITE DE SALUD	2 ALCALDE	3 SANIT.O AUX-ENF	4 PERS. CE NTRO DE	5 PERS. DE L HOSPIT	6 MIEMB. C OMUNIDAD	7 LIDERES DE COMUN	8 COMITE DESARROL	10 OTROS	ROW TOTAL
PIURA-TUMBES	1	6	1	1	3	4	103	3	4	30	155
		3.9	.5	.6	1.9	2.6	66.5	1.9	2.6	19.4	11.7
		28.6	5.0	1.2	4.8	5.9	13.1	15.8	66.7	11.2	
SAN MARTIN	2		2	4	2	4	139	2		6	159
			1.3	2.5	1.3	2.5	87.4	1.3		3.8	12.0
			10.0	4.9	3.2	5.9	17.7	10.5		2.2	
HUANUCO-PASCO-UC	3	5	1	5	4	6	153	4	1	17	196
		2.6	.5	2.5	2.0	3.1	78.1	2.0	.5	8.7	14.7
		23.8	5.0	6.2	6.5	8.8	19.5	21.1	16.7	6.4	
CALLAO	4	1			28		52			64	145
		.7			19.3		35.9			44.1	10.9
		4.8			45.2		6.6			24.0	
ICA	5	2		14	10	3	29	3	1	99	167
		1.2		8.4	6.0	5.4	17.4	1.8	.6	59.3	12.6
		9.5		17.3	16.1	13.2	3.7	15.8	16.7	37.1	
AREQUIPA	6	6	13	9	13		94	2		27	164
		3.7	7.9	5.5	7.9		57.3	1.2		16.5	12.3
		28.6	65.0	11.1	21.0		12.0	10.5		10.1	
PUNO	7	1	1	20	1	1	136	4		12	176
		.6	.6	11.4	.6	.6	77.3	2.3		6.8	13.2
		4.8	5.0	24.7	1.6	1.5	17.3	21.1		4.5	
ANCASH	8		2	28	1	44	80	1		12	168
			1.2	16.7	.6	26.2	47.6	.6		7.1	12.6
			10.0	34.6	1.6	64.7	10.2	5.3		4.5	
	COLUMN TOTAL	21	20	81	62	68	786	19	6	267	1330
		1.6	1.5	6.1	4.7	5.1	59.1	1.4	.5	20.1	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
771.54471	55	0.0000	0.654	32 OF 72 (44.4%)

NUMBER OF MISSING OBSERVATIONS = 1015

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR052 PARTICI.DEL INFOR.EN LA SELEC.DEL PROM

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR052 SI (1)	VAR052 NO (2)	ROW TOTAL
PIURA-TUMBES	1	86	135	222
		38.7	61.3	10.6
		11.8	10.0	
SAN MARTIN	2	101	165	267
		37.8	62.2	12.8
		13.9	12.2	
HUANUCO-PASCO-UC	3	127	170	297
		42.8	57.2	14.2
		17.4	12.5	
CALLAO	4	92	180	272
		33.8	66.2	13.0
		12.6	13.3	
ICA	5	21	273	294
		7.1	92.9	14.1
		2.9	20.1	
AREQUIPA	6	64	238	302
		21.2	78.8	14.5
		8.8	17.5	
PUNO	7	114	97	211
		54.0	46.0	10.1
		15.6	7.1	
ANCASH	8	124	97	221
		56.1	43.9	10.6
		17.0	7.1	
	COLUMN TOTAL	729	1357	2086
		34.9	65.1	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
212.93843	7	0.0	73.734	NONE

NUMBER OF MISSING OBSERVATIONS = 259

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR053 CONOCIM.DE UN PROM.PASIVO EN LA COMUNI

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR053 SI (1)	VAR053 NO (2)	ROW TOTAL
PIURA-TUMBES	1	44 19.1 11.7	185 80.9 10.6	230 10.8
SAN MARTIN	2	26 10.0 6.9	235 90.0 13.5	261 12.3
HUANUCO-PASCO-UC	3	61 19.9 16.2	245 80.1 14.1	307 14.5
CALLAO	4	86 30.2 22.8	199 69.8 11.4	285 13.4
ICA	5	23 7.8 6.1	271 92.2 15.5	294 13.8
AREQUIPA	6	72 23.9 19.1	229 76.1 13.1	301 14.2
PUNO	7	30 12.6 8.0	208 87.4 11.9	238 11.2
ANCASH	8	35 16.8 9.3	173 83.2 9.9	208 9.8
	COLUMN TOTAL	377 17.7	1747 82.3	2124 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
74.36052	7	0.0000	36.919	NONE

NUMBER OF MISSING OBSERVATIONS = 221

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR054 RAZON POR NO TRABAJAR DEL PROM. PASIVO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR054: EMIGRO (1)	BUSCO TR ARAJO (2)	FALTA DE PAGO (3)	(8)	ROW TOTAL
PIURA-TUMBES	1	36 54.3 29.3	10 17.9 7.4	9 16.1 2.9	1 1.8 2.3	56 9.2
SAN MARTIN	2	4 9.5 3.3	22 52.4 16.3	13 31.0 4.2	3 7.1 6.8	42 6.9
HUANUCO-PASCO-UC	3	8 9.4 6.5	21 24.7 15.5	49 57.6 15.9	7 8.2 15.9	85 13.9
CALLAO	4	12 13.6 9.8	16 18.2 11.9	56 63.6 18.1	4 4.5 9.1	88 14.4
ICA	5	2 1.5 1.6	8 5.9 5.9	103 75.7 33.3	23 16.9 52.3	136 22.3
AREQUIPA	6	30 24.4 24.4	42 34.1 31.1	47 38.2 15.2	4 3.3 9.1	123 20.1
PUNO	7	8 18.6 6.5	10 23.3 7.4	23 53.5 7.4	2 4.7 4.5	43 7.0
ANCASH	8	23 60.5 18.7	6 15.8 4.4	9 23.7 2.9		38 6.2
	COLUMN TOTAL	123 20.1	135 22.1	309 50.6	44 7.2	611 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
235.80136	21	0.0	2.736	4 OF 32 (12.5%)

NUMBER OF MISSING OBSERVATIONS = 1734

579

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR055 CONSULTAS AL PROMOTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR055 SI (1)	NO (2)	ROW TOTAL
PIURA-TUMBES	1	147 59.5 12.8	100 40.5 9.5	247 11.3
SAN MARTIN	2	117 43.0 10.2	155 57.0 14.9	272 12.4
HUANUCO-PASCO-UC	3	193 53.1 16.8	113 36.9 10.8	306 14.0
CALLAO	4	122 43.3 10.6	160 56.7 15.3	282 12.9
ICA	5	144 48.5 12.5	153 51.5 14.7	297 13.5
AREQUIPA	6	127 41.9 11.1	176 58.1 16.9	303 13.8
PUNO	7	156 59.1 13.6	108 40.9 10.4	264 12.0
ANCASH	8	143 64.7 12.4	78 35.3 7.5	221 10.1
	COLUMN TOTAL	1149 52.4	1043 47.6	2192 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
71.37043	7	0.0000	105.156	NONE

NUMBER OF MISSING OBSERVATIONS = 153

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR065 PROMOT. FORMA PARTE DEL COMITE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR065 SI	NO	NO SABE	ROW TOTAL
PIURA-TUMBES	1	52 29.5 21.1	61 34.7 13.3	63 35.8 10.5	176 13.5
SAN MARTIN	2	45 73.8 18.2	12 19.7 2.6	4 6.6 .7	61 4.7
HUANUCO-PASCO-UC	3	49 34.8 19.8	45 31.9 9.8	47 33.3 7.8	141 10.8
CALLAO	4	9 8.7 3.6	18 17.3 3.9	77 74.0 12.8	104 8.0
ICA	5	16 5.4 6.5	112 38.1 24.5	166 56.5 27.6	294 22.5
AREQUIPA	6	31 12.2 12.6	120 47.1 26.3	104 40.8 17.3	255 19.5
PUNO	7	27 23.7 10.9	42 36.8 9.2	45 39.5 7.5	114 8.7
ANCASH	8	18 11.3 7.3	47 29.4 10.3	95 59.4 15.8	160 12.3
	COLUMN TOTAL	247 18.9	457 35.0	601 46.1	1305 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
262.38372	14	0.0	11.546	NONE

NUMBER OF MISSING OBSERVATIONS = 1040

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR064 INFOR-MIEMB.AHORA/ANTES DEL COMIT.SALU

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR064 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	16 7.9 17.2	180 88.7 14.4	7 3.4 11.7	203 14.5
SAN MARTIN	2	14 18.4 15.1	62 81.6 5.0		76 5.4
HUANUCO-PASCO-UC	3	15 8.8 16.1	153 89.5 12.3	3 1.8 5.0	171 12.2
CALLAO	4	4 3.6 4.3	105 93.8 8.4	3 2.7 5.0	112 8.0
ICA	5	9 3.1 9.7	274 94.2 22.0	8 2.7 13.3	291 20.8
AREQUIPA	6	12 4.4 12.9	257 93.5 20.6	6 2.2 10.0	275 19.6
PUNO	7	11 9.7 11.8	76 67.3 6.1	26 23.0 43.3	113 8.1
ANCASH	8	12 7.5 12.9	141 88.1 11.3	7 4.4 11.7	160 11.4
	COLUMN TOTAL	93 6.6	1248 89.1	60 4.3	1401 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
140.61599	14	0.0000	3.255	3 OF 24 (12.5%)

NUMBER OF MISSING OBSERVATIONS = 944

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR063 RESPONS. DE ORGANIZ. COMITE DE SALUD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR063 1 PROMOTOR	2 AUXILIAR SANITAR	3 GRUPO MUNAL	4 CU ALCALDE	5 LIDERES LOCALES	6	7	8 OTROS	ROW TOTAL
PIURA-TUMBES	1	7	5	85	2	7			31	137
		5.1	3.5	62.0	1.5	5.1			22.6	17.9
		6.8	4.2	26.6	14.3	29.2			17.9	
SAN MARTIN	2	17		39					3	59
		28.8		66.1					5.1	7.7
		16.5		12.2					1.7	
HUANUCO-PASCO-UC	3	26	9	28		5	1		11	80
		32.5	11.3	35.0		6.3	1.3		13.8	10.5
		25.2	7.6	8.8		20.8	10.0		6.4	
CALLAO	4	11	5	42		2	2		2	64
		17.2	7.8	65.6		3.1	3.1		3.1	8.4
		10.7	4.2	13.1		8.3	20.0		1.2	
ICA	5	12	26	22		4	1		86	151
		7.9	17.2	14.6		2.6	.7		57.0	19.8
		11.7	21.8	6.9		16.7	10.0		49.7	
AREQUIPA	6	12	31	50	12	2	6	1	24	148
		8.1	20.9	40.5	8.1	1.4	4.1	.7	16.2	19.4
		11.7	26.1	18.8	85.7	8.3	60.0	100.0	13.9	
PUNO	7	5	9	28		3			7	51
		9.8	15.7	54.9		5.9			13.7	6.7
		4.9	6.7	8.8		12.5			4.0	
ANCASH	8	13	35	16		1			9	74
		17.6	47.3	21.6		1.4			12.2	9.7
		12.6	29.4	5.0		4.2			5.2	
	COLUMN TOTAL	103	119	320	14	24	10	1	173	764
		13.5	15.5	41.9	1.8	3.1	1.3	.1	22.6	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
368.30290	49	0.0000	0.067	32 OF 64 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 1581

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR061 COMITE DE SALUD ANTERIORMENTE

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR061 SI (1)	NO (2)	NO SABEN (3)	ROW TOTAL
PIURA-TUMBES	1	13 / 7.7 / 10.4	95 / 56.5 / 12.5	50 / 35.7 / 12.0	168 / 12.1
SAN MARTIN	2	2 / 3.3 / 1.6	49 / 78.7 / 6.3	11 / 18.0 / 2.2	61 / 4.4
HUANUCO-PASCO-UC	3	14 / 7.2 / 11.2	135 / 70.[illegible] / 17.8	44 / 22.7 / 8.8	194 / 14.0
CALLAO	4	43 / 17.3 / 34.4	167 / 67.1 / 21.9	39 / 15.7 / 7.8	249 / 18.0
ICA	5	10 / 4.0 / 8.0	133 / 53.0 / 18.1	103 / 41.0 / 20.6	251 / 18.1
AREQUIPA	6	20 / 10.1 / 16.0	96 / 48.2 / 12.5	83 / 41.7 / 16.6	199 / 14.3
PUNO	7	14 / 12.1 / 11.2	30 / 25.9 / 3.9	72 / 62.1 / 14.4	116 / 8.4
ANCASH	8	9 / 6.0 / 7.2	53 / 35.5 / 6.9	87 / 58.4 / 17.4	149 / 10.7
	COLUMN TOTAL	125 / 9.0	763 / 55.0	499 / 36.0	1387 / 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
172.62744	14	0.0	5.497	NONE

NUMBER OF MISSING OBSERVATIONS = 958

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR060 COMITE DE SALUD EN LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR060 SI (1)	NO (2)	NO SABEN (3)	ROW TOTAL
PIURA-TUMBES	1	120 47.8 22.1	67 26.7 7.7	64 25.5 12.6	251 13.0
SAN MARTIN	2	50 32.1 9.2	85 54.5 9.7	21 13.5 4.1	156 8.1
HUANUCO-PASCO-UC	3	68 25.6 12.5	140 52.6 16.0	58 21.8 11.4	265 13.8
CALLAO	4	31 10.7 5.7	207 71.4 23.7	52 17.9 10.2	290 15.1
ICA	5	63 21.3 11.6	141 47.6 16.1	92 31.1 18.1	296 15.4
AREQUIPA	6	111 36.9 20.5	129 42.9 14.7	61 20.3 12.0	301 15.6
PUNO	7	32 21.8 5.9	51 34.7 5.8	64 43.5 12.6	147 7.6
ANCASH	8	67 30.7 12.4	55 25.2 6.3	96 44.0 18.9	218 11.3
	COLUMN TOTAL	542 28.2	875 45.5	508 26.4	1925 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
244.10802	14	0.0	38.793	NONE

NUMBER OF MISSING OBSERVATIONS = 420

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR059 DEFINICION DEL COMITE DE SALUD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR059 1 AGRUP. MINIST.SA	2 GRUP.VEN PROB.SA	3 AYUD. RE SOLV.PRO	4 CONJUNTO	5 GENTE DE LA COMU	6	8 NO SABEN	ROW TOTAL
PIURA-TUMBES	1		55 23.4 11.8	78 33.2 22.5	5 2.1 6.7			97 41.3 7.8	235 10.8
SAN MARTIN	2	2 .7 8.0	18 6.1 3.9	18 6.1 5.2	30 10.2 40.0			226 76.9 18.2	294 13.5
HUANUCO-PASCO-UC	3	5 1.7 20.0	91 30.7 19.5	28 9.5 8.1	1 .3 1.3		1 .3 100.0	170 57.4 13.7	296 13.6
CALLAO	4	1 .3 4.0	120 41.5 25.7	47 16.3 13.6	4 1.4 5.3	4 1.4 23.5		113 39.1 9.1	289 13.3
ICA	5	4 1.4 16.0	85 29.4 18.4	44 15.0 12.7	6 2.0 8.0			153 52.2 12.3	293 13.5
AREQUIPA	6	10 3.4 40.0	58 19.5 12.4	65 21.8 18.8	8 2.7 10.7	8 2.7 47.1		149 50.0 12.0	298 13.7
PUNO	7	2 .7 8.0	21 7.5 4.5	42 15.0 12.1	4 1.4 5.3			211 75.4 17.0	280 12.9
ANCASH	8	1 .5 4.0	14 9.5 3.9	24 12.8 6.9	17 9.1 22.7	5 2.7 29.4		122 65.2 9.8	187 8.6
	COLUMN TOTAL	25 1.2	467 21.5	346 15.9	75 3.5	17 .8	1 .0	1241 57.1	2172 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
426.69135	42	0.0000	0.086	24 OF 56 (42.9%)

NUMBER OF MISSING OBSERVATIONS = 173

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR058 VISITAS DOMICILIARIAS DEL PROMOTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR058 SI (1)	NO (2)	(3)	ROW TOTAL
PIURA-TUMBES	1	136	114	1	251
		54.2	45.4	.4	11.3
		12.4	10.2	16.7	
SAN MARTIN	2	181	116		297
		60.9	39.1		13.4
		16.5	10.3		
HUANUCO-PASCO-UC	3	176	132	1	309
		57.0	42.7	.3	13.9
		16.1	11.8	16.7	
CALLAO	4	99	182	2	283
		35.0	64.3	.7	12.7
		9.0	16.2	33.3	
ICA	5	120	175	1	296
		40.5	59.1	.3	13.3
		11.0	15.6	16.7	
AREQUIPA	6	123	177	1	301
		40.9	58.8	.3	13.5
		11.2	15.8	16.7	
PUNO	7	159	107		266
		59.8	40.2		12.0
		14.5	9.5		
ANCASH	8	101	118		219
		46.1	53.9		9.9
		9.2	10.5		
	COLUMN TOTAL	1095	1121	6	2222
		49.3	50.5	.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
82.48865	14	0.0000	0.591	8 OF 24 (33.3%)

NUMBER OF MISSING OBSERVATIONS = 123

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR057 RAZONES PARA NO IR AL PROMUTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 NO TIENE MEDICIN	2 NO TIENE SAL-REH	3 NO LO NE CESITAMO	4 NO LE NEM-CONF	5 TE CENTRO EDICO	6 M NO LO CE NOZCO	7 CO NO SE E ES	8 QU	ROW TOTAL
PIURA-TUMBES	1	4		31	2	11	5	4		57
		7.0		54.4	3.5	19.3	8.8	7.0		7.0
		7.7		7.8	1.6	11.6	4.5	12.5		
SAN MARTIN	2	28		75	2	10	5	5		125
		22.4		60.0	1.6	8.0	4.0	4.0		15.3
		53.8		19.0	1.6	10.5	4.5	15.6		
HUANUCO-PASCO-UC	3	3		44	16	8	10	1		82
		3.7		53.7	19.5	9.8	12.2	1.2		10.1
		5.8		11.1	12.7	8.4	9.1	3.1		
CALLAO	4	3	1	72	35	6	11	6		134
		2.2	.7	53.7	26.1	4.5	8.2	4.5		16.4
		5.8	50.0	18.2	27.8	6.3	10.0	18.8		
ICA	5	1	1	38	5	19	54	11	1	130
		.8	.8	29.2	3.8	14.6	41.5	8.5	.8	16.0
		1.9	50.0	9.6	4.0	20.0	49.1	34.4	33.3	
AREQUIPA	6	2		53	35	26	12	4	2	134
		1.5		39.6	26.1	19.4	9.0	3.0	1.5	16.4
		3.8		13.4	27.8	27.4	10.9	12.5	66.7	
PUNO	7	6		49	14	13	9			91
		6.6		53.8	15.4	14.3	9.9			11.2
		11.5		12.4	11.1	13.7	8.2			
ANCASH	8	5		33	17	2	4	1		62
		8.1		53.2	27.4	3.2	6.5	1.6		7.6
		9.6		8.4	13.5	2.1	3.6	3.1		
	COLUMN TOTAL	52	2	395	126	95	110	32	3	815
		6.4	.2	48.5	15.5	11.7	13.5	3.9	.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
284.75464	49	0.0000	0.140	23 OF 64 (35.9%)

NUMBER OF MISSING OBSERVATIONS = 1530

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR056 TIPOS DE PROB. DE SALUD

VAR001	COUNT / ROW PCT / COL PCT	VAR056 INTOXICACIONES 12	NUTRICION 13	ENF. DE LA PIEL 14	REUMATISMO 15	HERIDA 16	MALARIA 17	ENF.CONTAGIOSAS 18	ROW TOTAL
PIURA-TUMBES	1		1	5	3	4			136
			.7	3.7	2.2	2.9			12.8
			12.5	23.8	15.0	4.4			
SAN MARTIN	2		1	3	6	7	2		111
			.9	2.7	5.4	6.3	1.8		10.4
			12.5	14.3	30.0	7.7	100.0		
HUANUCO-PASCO-UC	3	2	3	2	1	15			173
		1.2	1.7	1.2	.6	8.7			16.3
		28.6	37.5	9.5	5.0	16.5			
CALLAO	4		1	4		14			105
			1.0	3.8		13.3			9.9
			12.5	19.0		15.4			
ICA	5	1	1	2		10			131
		.8	.8	1.5		7.6			12.3
		14.3	12.5	9.5		11.0			
AREQUIPA	6	2	1	1	3	15			126
		1.6	.8	.8	2.4	11.9			11.8
		28.6	12.5	4.8	15.0	16.5			
PUNO	7	1		1	2	19			150
		.7		.7	1.3	12.7			14.1
		14.3		4.8	10.0	20.9			
ANCASH	8	1		3	5	7		1	132
		.8		2.3	3.8	5.3		.8	12.4
		14.3		14.3	25.0	7.7		100.0	
	COLUMN TOTAL	7 .7	8 .8	21 2.0	20 1.9	91 8.6	2 .2	1 .1	1064 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
365.99201	112	0.0000	0.099	83 OF 136 (61.0%)

NUMBER OF MISSING OBSERVATIONS = 1281

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR056 TIPOS DE PROB. DE SALUD PAGE 1 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR056 1 CONTR. DE NATALI	2 DOLORES DE PARTO	3 ATIEN. HI JOS	4 DE MEDIC FAMI INAS	5 PONGA IN YECCIONE	6 ACONS. SO BRE HIGI	7 GRIPE/RE SFR/DOL.	8 DIARREAS	10 ULCERAS	11 FIEBRES	ROW TOTAL
PIURA-TUMBES	1	5 3.7 22.7	7 5.1 17.1	8 5.9 6.0	2 1.5 16.7	15 11.0 11.7	1 .7 50.0	22 16.2 8.8	17 12.5 9.4		46 33.8 34.1	136 12.8
SAN MARTIN	2		7 6.3 17.1	10 9.0 7.5		9 8.1 7.0		31 27.9 12.4	10 9.0 5.6	2 1.8 20.0	23 20.7 17.0	111 10.4
HUANUCO-PASCO-UC	3	3 1.7 13.6	5 2.9 12.2	8 4.6 6.0		45 26.0 35.2		25 14.5 10.0	37 21.4 20.6		27 15.6 20.0	173 16.3
CALLAO	4		2 1.9 4.9	8 7.6 6.0	1 1.0 8.3	18 17.1 14.1		32 30.5 12.7	20 19.0 11.1	2 1.9 20.0	3 2.9 2.2	105 9.9
ICA	5	11 8.4 50.0		16 12.2 12.0	5 3.8 41.7	23 17.6 18.0		21 16.0 8.4	31 23.7 17.2	3 2.3 30.0	7 5.3 5.2	131 12.3
AREQUIPA	6	2 1.6 9.1	7 5.6 17.1	22 17.5 16.5		5 4.0 3.9	1 .8 50.0	31 24.6 12.4	27 21.4 15.0	1 .8 10.0	8 6.3 5.9	126 11.8
PUNO	7	1 .7 4.5	6 4.9 14.6	32 21.3 24.1	2 1.3 16.7	7 4.7 5.5		43 28.7 17.1	15 10.0 8.3	2 1.3 20.0	19 12.7 14.1	150 14.1
ANCASH	8		7 5.3 17.1	29 22.0 21.8	2 1.5 16.7	6 4.5 4.7		46 34.8 18.3	23 17.4 12.8		2 1.5 1.5	132 12.4
(CONTINUED)	COLUMN TOTAL	22 2.1	41 3.9	133 12.5	12 1.1	128 12.0	2 .2	251 23.6	180 16.9	10 .9	135 12.7	1064 100.0

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR066 COMITE DE SALUD APOYO PROMOTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR066 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	72 40.7 31.4	31 17.5 9.4	74 41.8 10.6	177 14.0
SAN MARTIN	2	15 24.2 6.6	38 61.3 11.5	9 14.5 1.3	62 4.9
HUANUCO-PASCO-UC	3	37 26.4 16.2	42 30.0 12.7	61 43.6 8.7	140 11.1
CALLAO	4	12 12.0 5.2	4 4.0 1.2	84 84.0 12.0	100 7.9
ICA	5	12 4.3 5.2	93 33.3 28.1	174 62.4 24.8	279 22.1
AREQUIPA	6	32 13.2 14.0	64 26.0 20.5	143 58.8 20.4	243 19.3
PUNO	7	26 23.6 11.4	25 23.5 7.5	58 52.7 8.3	110 8.7
ANCASH	8	23 15.3 10.0	29 19.3 8.8	98 65.3 14.0	150 11.9
	COLUMN TOTAL	229 18.2	331 26.2	701 55.6	1261 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
204.24307	14	0.0	11.259	NONE

NUMBER OF MISSING OBSERVATIONS = 1094

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR080 LA ULTIMA PERSONA ENFERMA EN LA CASA

VAR001	COUNT / ROW PCT / COL PCT	VAR080: ADULTO FEMENINO (1)	ADULTO MASCULINO (2)	NINO MAYOR DE 5 (3)	NINO MENOR DE 5 (4)	TODOS (5)	ROW TOTAL
PIURA-TUMBES	1	77	50	38	60	2	227
		33.9	22.0	16.7	26.4	.9	11.2
		11.1	11.9	11.0	11.1	13.3	
SAN MARTIN	2	87	59	55	52	1	254
		34.3	23.2	21.7	20.5	.4	12.6
		12.5	14.0	15.9	9.6	6.7	
HUANUCO-PASCO-UC	3	80	61	52	104	1	308
		26.0	19.8	20.1	33.8	.3	15.3
		11.5	14.5	17.9	19.2	6.7	
CALLAO	4	80	42	42	73	7	244
		32.8	17.2	17.2	29.9	2.9	12.1
		11.5	10.0	12.1	13.5	46.7	
ICA	5	88	59	38	87	3	275
		32.0	21.5	13.8	31.6	1.1	13.6
		12.7	14.0	11.0	16.1	20.0	
AREQUIPA	6	91	47	36	84		268
		34.0	17.5	17.2	31.3		13.3
		13.1	11.1	13.3	15.5		
PUNO	7	112	56	33	44	1	246
		45.5	22.8	13.4	17.9	.4	12.2
		16.1	13.3	9.5	8.1	6.7	
ANCASH	8	79	48	33	37		197
		40.1	24.4	16.8	18.8		9.8
		11.4	11.4	9.5	6.8		
	COLUMN TOTAL	694	422	347	541	15	2019
		34.4	20.9	17.2	26.8	.7	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
78.83582	28	0.0000	1.464	8 OF 40 (20.0%)

NUMBER OF MISSING OBSERVATIONS = 326

CROSSTABULATION OF VAR001 REGION DE SALUD BY VAR081 LA ENFERMEDAD DE LA PERSONA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 GRIPE/RESFR/DOL.	2 ESTOMAGO	3 ACCIDENTE	4 ENVENENAMIENTO	5 DIARREA O PARASI	6 NUTRICION	7 COMPLICACION PAR	8 OTRO	ROW TOTAL
PIURA-TUMBES	1	68	11	7		34	2		107	229
		29.7	4.8	3.1		14.8	.9		46.7	11.2
		11.0	4.2	5.6		12.1	1.4		18.3	
SAN MARTIN	2	92	27	9	5	23	8	5	90	259
		35.5	10.4	3.5	1.9	8.9	3.1	1.9	34.7	12.7
		14.9	10.3	7.3	45.5	8.2	5.6	35.7	15.4	
HUANUCO-PASCO-UC	3	76	34	21	2	61	32	1	83	310
		24.5	11.0	6.8	.5	19.7	10.3	.3	26.8	15.2
		12.3	12.9	16.9	18.2	21.6	22.5	7.1	14.2	
CALLAO	4	53	22	10	1	30	36	1	85	238
		22.3	9.2	4.2	.4	12.6	15.1	.4	35.7	11.7
		8.6	8.4	8.1	9.1	10.6	25.4	7.1	14.5	
ICA	5	95	36	25	2	34	9	2	76	279
		34.1	12.9	9.0	.7	12.2	3.2	.7	27.2	13.7
		15.4	13.7	20.2	18.2	12.1	6.3	14.3	13.0	
AREQUIPA	6	86	53	21	1	43	22	2	46	272
		30.9	19.5	7.7	.4	15.8	8.1	.7	16.9	13.3
		13.6	20.2	16.9	9.1	15.2	15.5	14.3	7.8	
PUNO	7	83	41	14		26	23	1	63	251
		33.1	16.3	5.6		10.4	9.2	.4	25.1	12.3
		13.5	15.5	11.3		9.2	16.2	7.1	10.8	
ANCASH	8	65	39	17		31	10	2	36	200
		32.5	19.5	8.5		15.5	5.0	1.0	18.0	9.8
		10.6	14.8	13.7		11.0	7.0	14.3	6.1	
	COLUMN TOTAL	616	263	124	11	282	142	14	586	2038
		30.2	12.9	6.1	.5	13.8	7.0	.7	28.8	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
211.95375	49	0.0000	1.079	16 OF 64 (25.0%)

NUMBER OF MISSING OBSERVATIONS = 307

598

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR082 AYUDA DEL PROMOTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR082 SI (1)	VAR082 NO (2)	ROW TOTAL
PIURA-TUMBES	1	105 45.9 11.8	124 54.1 10.7	229 11.2
SAN MARTIN	2	104 37.8 11.7	171 62.2 14.8	275 13.4
HUANUCO-PASCO-UC	3	158 50.0 17.8	158 50.0 13.6	316 15.4
CALLAO	4	69 30.7 7.8	156 69.3 13.5	225 11.0
ICA	5	106 38.3 12.0	171 61.7 14.8	277 13.5
AREQUIPA	6	114 40.7 12.9	166 59.3 14.3	280 13.7
PUNO	7	101 39.6 11.4	154 60.4 13.3	255 12.5
ANCASH	8	130 68.8 14.7	59 31.2 5.1	189 9.2
	COLUMN TOTAL	887 43.4	1159 56.5	2046 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
79.38018	7	0.0000	81.937	NONE

NUMBER OF MISSING OBSERVATIONS = 299

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR083 LOS MEJORES CONSEJOS PARA LA ENFERMEDAD
PAGE 1 OF 2

VAR001	COUNT / ROW PCT / COL PCT	VAR083 MEDICO 1	PROMOTOR SANITARI DE SALUD 2	ENFERMER A/O 3	FARMACEU TICO 4	PARTERA 5	CURANDER O/A 6	PARIENTE 7	AMIGO 8	10	11	ROW TOTAL
PIURA-TUMBES	1	69 32.1 12.1	72 33.5 11.5	15 7.0 8.6	4 1.9 12.1			1 .5 2.2	10 4.7 5.5	9 4.2 6.8		215 11.0
SAN MARTIN	2	39 15.8 6.9	82 33.2 13.1	33 13.4 18.9	3 1.2 9.1	2 .8 11.8	3 1.2 18.8	3 1.6 8.9	19 7.7 10.4	17 6.9 12.9		247 12.6
HUANUCO-PASCO-UC	3	66 22.0 11.6	108 36.0 17.2	10 3.3 5.7	6 2.0 18.2	2 .7 11.8	8 2.7 50.0	6 2.0 13.3	61 20.3 33.5	26 8.7 19.7		300 15.4
CALLAO	4	107 45.9 18.8	49 21.0 7.8	8 3.4 4.6	5 2.1 15.2	1 .4 5.9			11 4.7 6.0	28 12.0 21.2	1 .4 25.0	233 11.9
ICA	5	153 56.5 26.9	67 25.5 11.0	3 1.1 1.7	3 1.1 9.1	4 1.5 23.5			10 3.7 5.5	14 5.2 10.6	2 .7 50.0	271 13.9
AREQUIPA	6	82 31.3 14.4	78 29.8 12.4	48 18.3 27.4	7 2.7 21.2		3 1.1 18.8	9 3.4 20.0	9 3.4 4.9	13 5.0 9.8	1 .4 25.0	262 13.4
PUNO	7	23 9.7 4.0	69 29.0 11.0	32 13.4 18.3	4 1.7 12.1	2 .8 11.8	1 .4 6.3	23 9.7 51.1	48 20.2 26.4	19 8.0 14.4		238 12.2
ANCASH	8	30 16.0 5.3	100 53.2 15.9	26 13.8 14.9	1 .5 3.0	6 3.2 35.3	1 .5 6.3	2 1.1 4.4	14 7.4 7.7	6 3.2 4.5		188 9.6
(CONTINUED)	COLUMN TOTAL	569 29.1	627 32.1	175 9.0	33 1.7	17 .9	16 .8	45 2.3	182 9.3	132 6.8	4 .2	1954 100.0

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR083 LOS MEJORES CONSEJOS PARA LA ENFERMEDAD

VAR001	COUNT / ROW PCT / COL PCT	VAR083 OTRO (2)	(3)	(5)	ROW TOTAL
PIURA-TUMBES	1	10 4.7 32.3		25 11.6 20.5	215 11.0
SAN MARTIN	2	5 2.0 16.1		40 16.2 32.8	247 12.6
HUANUCO-PASCO-UC	3			7 2.3 5.7	300 15.4
CALLAO	4	5 2.1 16.1		18 7.7 14.8	233 11.9
ICA	5	8 3.0 25.8	1 .4 100.0	4 1.5 3.3	271 13.9
AREQUIPA	6	2 .6 6.5		10 3.8 8.2	262 13.4
PUNO	7			17 7.1 13.9	238 12.2
ANCASH	8	1 .5 3.2		1 .5 .8	188 9.6
	COLUMN TOTAL	31 1.6	1 .1	122 6.2	1954 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
632.75826	84	0.0000	0.096	49 OF 104 (47.1%)

NUMBER OF MISSING OBSERVATIONS = 391

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR084 HAN IDO AL PROM.PARA CURAR DIARREA NIÑO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR084 SI (1)	VAR084 NO (2)	ROW TOTAL
PIURA-TUMBES	1	55	167	222
		24.8	75.2	10.7
		11.8	10.4	
SAN MARTIN	2	31	221	252
		12.3	87.7	12.1
		6.6	13.7	
HUANUCO-PASCO-JC	3	102	209	311
		32.8	67.2	15.0
		21.8	13.0	
CALLAO	4	40	187	227
		17.6	82.4	10.9
		8.5	11.6	
ICA	5	64	231	295
		21.7	78.3	14.2
		13.7	14.3	
AREQUIPA	6	65	228	293
		22.2	77.8	14.1
		13.9	14.2	
PUNO	7	62	207	269
		23.0	77.0	12.9
		13.2	12.8	
ANCASH	8	49	161	210
		23.3	76.7	10.1
		10.5	10.0	
	COLUMN TOTAL	468	1611	2079
		22.5	77.5	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
37.94341	7	0.0000	47.273	NONE

NUMBER OF MISSING OBSERVATIONS = 266

C R O S S T A B U L A T I O N O F
VAR001 REGION DE SALUD BY VAR085 ENSENA A HERVIR AGUA

VAR001 \ VAR085 (COUNT / ROW PCT / COL PCT)	1 SI	2 NO	ROW TOTAL
1 PIURA-TUMBES	67 59.3 12.6	46 40.7 8.4	113 10.5
2 SAN MARTIN	78 69.6 14.7	34 30.4 6.2	112 10.4
3 HUANUCO-PASCO-UC	84 52.5 15.8	76 47.5 13.9	160 14.8
4 CALLAO	70 44.9 13.2	86 55.1 15.7	156 14.4
5 ICA	83 39.7 15.6	126 60.3 23.0	209 19.4
6 AREQUIPA	67 41.4 12.6	95 58.6 17.3	162 15.0
7 PUNO	50 49.5 9.4	51 50.5 9.3	101 9.4
8 ANCASH	33 49.3 6.2	34 50.7 6.2	67 6.2
COLUMN TOTAL	532 49.3	548 50.7	1080 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
35.71163	7	0.0000	33.004	NONE

NUMBER OF MISSING OBSERVATIONS = 1265

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR086 TRATAMIENTO DE DIARREA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR086: SALES RE HIDRATAN	SUERO CA SERO	JARABE A NTIDIARR	MAND.PUE STU/CENT	NO SABE	NADA	YERBAS	ANTIBIOT ICOS	OTRO 1R O.	OTRO 2D O.	ROW TOTAL
		1	2	3	4	5	6	7	8	10	11	
PIURA-TUMBES	1	20 30.3 16.4	4 6.1 4.0	19 28.8 12.5	1 1.5 10.0	8 12.1 47.1	1 1.5 6.7	1 1.5 2.6		7 10.6 17.1	5 7.6 26.3	66 12.7
SAN MARTIN	2		6 16.2 5.9	16 43.2 10.5	2 5.4 20.0		6 16.2 40.0	1 2.7 2.6	1 2.7 50.0	3 8.1 7.3	2 5.4 10.5	37 7.1
HUANUCO-PASCO-JC	3	6 5.9 4.9	29 28.4 28.7	53 52.0 34.9	1 1.0 10.0	2 2.0 11.8		3 2.9 7.7	1 1.0 50.0	6 5.9 14.6	1 1.0 5.3	102 19.7
CALLAO	4	16 43.2 13.1	9 24.3 8.9	7 18.9 4.6				4 10.8 10.3		1 2.7 2.4		37 7.1
ICA	5	58 60.4 47.5	2 2.1 2.0	5 5.2 3.3				17 17.7 43.6		9 9.4 22.0	5 5.2 26.3	96 18.5
AREQUIPA	6	8 10.4 6.6	32 41.5 31.7	10 13.0 6.6	3 3.9 30.0	1 1.3 5.9	7 9.1 46.7	9 11.7 23.1		5 6.5 12.2	2 6 [illegible]	77 14.9
PUNO	7	5 8.2 4.1	10 16.4 9.9	25 41.0 16.4	2 3.3 20.0	5 8.2 29.4	1 1.6 6.7	3 4.9 7.7		7 11.5 17.1	3 4.9 15.8	61 11.8
ANCASH	8	9 21.4 7.4	9 21.4 8.9	17 40.5 11.2	1 2.4 10.0	1 2.4 5.9		1 2.4 2.6		3 7.1 7.3	1 2.4 5.3	42 8.1
	COLUMN TOTAL	122 23.6	101 19.5	152 29.3	10 1.9	17 3.3	15 2.9	39 7.5	2 .4	41 7.9	19 3.7	518 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
315.02000	63	0.0000	0.143	49 OF 80 (61.3%)

NUMBER OF MISSING OBSERVATIONS = 1827

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR087 USO DE AGUA HERVIDA PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR087 ISI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	40 58.8 18.2	12 17.5 7.1	16 23.5 13.6	68 13.4
SAN MARTIN	2	6 13.6 2.7	30 68.2 17.5	8 18.2 6.8	44 8.7
HUANUCO-PASCO-UC	3	37 37.0 16.8	26 26.0 15.3	37 37.0 31.4	100 19.7
CALLAO	4	21 65.6 9.5	9 28.1 5.3	2 6.3 1.7	32 6.3
ICA	5	57 70.4 25.9	14 17.3 8.2	10 12.3 8.5	81 15.9
AREQUIPA	6	33 34.0 15.0	43 44.3 25.3	21 21.6 17.8	97 19.1
PUNO	7	13 21.7 5.9	28 46.7 16.5	19 31.7 16.1	60 11.8
ANCASH	8	13 50.0 5.9	8 30.8 4.7	5 19.2 4.2	26 5.1
	COLUMN TOTAL	220 43.3	179 33.5	118 23.2	508 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
94.39422	14	0.0000	6.039	NONE

NUMBER OF MISSING OBSERVATIONS = 1837

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR088 CONSEJ. SOBRE ALIMENT. NINO CON DIARREA

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR088: CONTINUAR ALIMEN (1)	SUSPENDE ALIMENT (2)	SUSPENDE LECHE M (3)	NO DIJO NADA (4)	NO SE ACUERDA (5)	ROW TOTAL
PIURA-TUMBES	1	33	19	8	8	6	74
		44.6	25.7	10.8	10.8	8.1	13.2
		25.4	11.7	11.0	9.5	5.4	
SAN MARTIN	2	6	13	10	10	3	42
		14.3	31.0	23.8	23.8	7.1	7.5
		4.6	8.0	13.7	11.9	2.7	
HUANUCO-PASCO-UC	3	19	28	14	12	44	117
		16.2	23.9	12.0	10.3	37.6	20.8
		14.6	17.2	19.2	14.3	39.3	
CALLAO	4	17	11	10	4	2	44
		38.6	25.0	22.7	9.1	4.5	7.8
		13.1	6.7	13.7	4.8	1.8	
ICA	5	10	34	15	3	16	78
		12.8	43.5	19.2	3.8	20.5	13.9
		7.7	20.9	20.5	3.6	14.3	
AREQUIPA	6	25	32	6	10	8	81
		30.9	39.5	7.4	12.3	9.9	14.4
		19.2	19.6	8.2	11.9	7.1	
PUNO	7	12	19	8	17	20	76
		15.8	25.0	10.5	22.4	26.3	13.5
		9.2	11.7	11.0	20.2	17.9	
ANCASH	8	8	7	2	20	13	50
		16.0	14.0	4.0	40.0	26.0	8.9
		6.2	4.3	2.7	23.8	11.6	
	COLUMN TOTAL	130	163	73	84	112	562
		23.1	29.0	13.0	14.9	19.9	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
136.70128	28	0.0000	5.456	NONE

NUMBER OF MISSING OBSERVATIONS = 1783

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR089 TRATAMIENTO DE GRIPE

VAR001	COUNT / ROW PCT / COL PCT	VAR089 SI (1)	VAR089 NO (2)	ROW TOTAL
PIURA-TUMBES	1	96 42.3 16.2	131 57.7 9.0	227 11.1
SAN MARTIN	2	54 20.8 9.1	206 79.2 14.1	260 12.7
HUANUCO-PASCO-UC	3	101 33.3 17.1	202 66.7 13.8	303 14.8
CALLAO	4	40 18.4 6.8	177 81.5 12.1	217 10.6
ICA	5	76 26.9 12.8	207 73.1 14.2	243 13.8
AREQUIPA	6	70 24.7 11.8	213 75.3 14.6	243 13.8
PUNO	7	79 29.4 13.3	190 70.6 13.0	269 13.1
ANCASH	8	76 36.2 12.8	134 63.8 9.2	210 10.2
	COLUMN TOTAL	592 28.8	1460 71.2	2052 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
51.11823	7	0.0000	60.585	NONE

NUMBER OF MISSING OBSERVATIONS = 293

209

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR090 INDICACIONES GRIPE

VAR001	VAR090 (COUNT / ROW PCT / COL PCT)	1 PASTILLA JARABES	2 INYECCION	3 BOLSITA SALVADOR	4 NO SE ACORDA	5	ROW TOTAL
PIURA-TUMBES	1	61	27	7	4	2	101
		60.4	26.7	6.9	4.0	2.0	15.6
		15.7	23.5	5.7	66.7	12.5	
SAN MARTIN	2	35	9	26		2	72
		48.6	12.5	36.1		2.8	11.1
		9.0	7.8	21.3		12.5	
HUANUCO-PASCO-UC	3	37	10	58	1	2	108
		34.3	9.3	53.7	.9	1.9	16.7
		9.5	8.7	47.5	16.7	12.5	
CALLAO	4	16	17	8		1	42
		38.1	40.5	19.0		2.4	6.5
		4.1	14.8	6.6		6.3	
ICA	5	48	23	9		1	81
		59.3	28.4	11.1		1.2	12.5
		12.4	20.0	7.4		6.3	
AREQUIPA	6	50	13	10		1	74
		67.6	17.5	13.5		1.4	11.4
		12.9	11.3	8.2		6.3	
PUNO	7	69	9	2		4	84
		82.1	10.7	2.4		4.8	13.0
		17.8	7.8	1.6		25.0	
ANCASH	8	72	7	2	1	3	85
		84.7	8.2	2.4	1.2	3.5	13.1
		18.6	6.1	1.6	16.7	18.8	
	COLUMN TOTAL	388	115	122	6	16	647
		60.0	17.8	18.9	.9	2.5	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
200.49950	28	0.0	0.389	16 OF 40 (40.0%)

NUMBER OF MISSING OBSERVATIONS = 1698

60

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR091 DISPONIB.MEDICINAS PARA GRIPE O RESFRIO

VAR001	COUNT / ROW PCT / COL PCT	VAR091 1 MEDIC.DADA POR P DE CONSE	2 DIJO DON DE DIJO	3 NO DIO N I DIJO D	4 NO SE	ROW TOTAL
PIURA-TUMBES	1	79	28	9	2	118
		66.9	23.7	7.6	1.7	17.0
		16.0	16.7	37.5	33.3	
SAN MARTIN	2	57	15	1	2	75
		76.0	20.0	1.3	2.7	10.8
		11.5	8.9	4.2	33.3	
HUANUCO-PASCO-UC	3	77	32	2		111
		69.4	28.8	1.8		16.0
		15.6	19.0	8.3		
CALLAO	4	31	12	1		44
		70.5	27.3	2.3		6.3
		6.3	7.1	4.2		
ICA	5	60	28	2		90
		66.7	31.1	2.2		13.0
		12.1	16.7	8.3		
AREQUIPA	6	51	29	1	1	82
		62.2	35.4	1.2	1.2	11.8
		10.3	17.3	4.2	16.7	
PUNO	7	77	10	4	1	92
		83.7	10.9	4.3	1.1	13.3
		15.6	6.0	16.7	16.7	
ANCASH	8	63	14	4		81
		77.8	17.3	4.9		11.7
		12.7	8.3	16.7		
	COLUMN TOTAL	495	168	24	6	693
		71.4	24.2	3.5	.9	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
37.32608	21	0.0154	0.381	16 OF 32 (50.0%)

NUMBER OF MISSING OBSERVATIONS = 1652

6 ex

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR092 CAMPANA DE VACUNACION AND PASADO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR092: SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	214 85.9 11.8	17 6.8 7.1	18 7.2 11.2	249 11.2
SAN MARTIN	2	179 65.8 9.9	72 26.5 29.9	21 7.7 13.0	272 12.3
HUANUCO-PASCO-UC	3	280 88.6 15.4	17 5.4 7.1	19 6.0 11.8	316 14.2
CALLAO	4	215 75.8 11.9	40 14.0 16.6	29 10.2 18.0	285 12.8
ICA	5	242 82.0 13.3	23 7.8 9.5	30 10.2 18.6	295 13.3
AREQUIPA	6	267 89.6 14.7	15 5.4 6.5	15 5.0 9.3	298 13.4
PUNO	7	222 77.9 12.2	45 15.8 18.7	18 6.3 11.2	285 12.8
ANCASH	8	196 89.9 10.8	11 5.0 4.5	11 5.0 6.8	218 9.8
	COLUMN TOTAL	1816 81.9	241 10.9	161 7.3	2218 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
128.03127	16	0.0000	15.824	NONE

NUMBER OF MISSING OBSERVATIONS = 127

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR093 PARTICIP.PROM. EN CAMPANA DE VACUNACION

VAR001	COUNT / ROW PCT / COL PCT	VAR093 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	96 41.9 11.3	57 24.9 10.3	76 33.2 13.1	229 11.6
SAN MARTIN	2	87 41.8 10.3	81 38.9 14.7	40 19.2 6.9	208 10.5
HUANUCO-PASCO-UC	3	184 63.4 21.7	59 20.3 10.7	47 16.2 8.1	290 14.7
CALLAO	4	69 30.7 8.1	69 30.7 12.5	87 38.7 15.1	225 11.4
ICA	5	70 24.5 8.3	70 24.5 12.7	146 51.0 25.3	286 14.5
AREQUIPA	6	62 22.0 7.3	129 45.7 23.4	91 32.3 15.7	282 14.3
PUNO	7	155 62.5 18.3	42 16.9 7.6	51 20.6 8.8	248 12.5
ANCASH	8	125 59.8 14.7	44 21.1 8.0	40 19.1 6.9	209 10.6
	COLUMN TOTAL	848 42.9	551 27.9	578 29.2	1977 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
281.20248	14	0.0	57.971	NONE

NUMBER OF MISSING OBSERVATIONS = 368

CROSSTABULATION OF
VAR001 REGION DE SALUD BY VAR094 ATENCION DE PARTOS POR EL PROM. EN CASA

VAR001 (COUNT / ROW PCT / COL PCT)	VAR094: SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
1 PIURA-TUMBES	30 13.8 22.4	178 82.0 9.9	9 4.1 12.2	217 10.8
2 SAN MARTIN	8 3.4 6.0	228 95.8 12.7	2 .8 2.7	238 11.9
3 HUANUCO-PASCO-UC	19 6.4 14.2	262 87.6 14.6	18 6.0 24.3	299 14.9
4 CALLAO	2 .9 1.5	207 96.7 11.5	5 2.3 6.8	214 10.7
5 ICA	7 2.6 5.2	260 94.9 14.5	7 2.6 9.5	274 13.7
6 AREQUIPA	19 6.8 14.2	256 91.1 14.3	6 2.1 8.1	281 14.0
7 PUNO	33 12.1 24.6	231 84.9 12.9	8 2.9 10.8	272 13.6
8 ANCASH	16 7.7 11.9	173 83.2 9.6	19 9.1 25.7	208 10.4
COLUMN TOTAL	134 6.7	1795 89.6	74 3.7	2003 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
87.46831	14	0.0000	7.684	NONE

NUMBER OF MISSING OBSERVATIONS = 342

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR110 ASISTENCIA EN CHARLAS DEL PROMOTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR110 SI (1)	VAR110 NO (2)	ROW TOTAL
PIURA-TUMBES	1	31 13.5 5.2	199 86.5 13.3	230 11.0
SAN MARTIN	2	77 27.1 12.9	207 72.9 13.9	284 13.6
HUANUCO-PASCO-UC	3	108 35.4 18.1	197 64.6 13.2	305 14.6
CALLAO	4	77 30.2 12.9	178 69.8 11.9	255 12.2
ICA	5	60 21.9 10.0	214 78.1 14.3	274 13.1
AREQUIPA	6	62 22.8 10.4	210 77.2 14.1	272 13.0
PUNO	7	122 45.4 20.4	147 54.6 9.8	269 12.9
ANCASH	8	61 30.0 10.2	142 70.0 9.5	203 9.7
	COLUMN TOTAL	596 28.6	1494 71.4	2092 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
81.03134	7	0.0000	58.028	NONE

NUMBER OF MISSING OBSERVATIONS = 253

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR135 ENSENANZA HACER SALES O SUERO CASERO

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR135 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	68 30.1 21.1	135 59.7 9.0	23 10.2 18.0	226 11.6
SAN MARTIN	2	9 3.0 2.8	284 95.6 19.0	4 1.3 3.1	297 15.3
HUANUCO-PASCO-UC	3	42 15.1 13.0	220 79.1 14.7	16 5.8 12.5	278 14.3
CALLAO	4	59 28.9 18.3	144 70.6 9.6	1 .5 .8	204 10.5
ICA	5	78 27.5 24.2	199 70.1 13.3	7 2.5 5.5	284 14.6
AREQUIPA	6	27 11.2 8.4	214 88.4 14.3	1 .4 .8	242 12.5
PUNO	7	15 6.6 4.7	139 61.0 9.3	74 32.5 57.8	228 11.7
ANCASH	8	24 13.0 7.5	158 85.9 10.5	2 1.1 1.6	184 9.5
	COLUMN TOTAL	322 16.6	1493 76.9	128 6.6	1943 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
445.46547	14	0.0	12.121	NONE

NUMBER OF MISSING OBSERVATIONS = 402

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR136 PROMO. PLAN FAMILIAR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR136 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	27	155	32	214
		12.6	72.4	15.0	10.0
		8.1	9.5	19.5	
SAN MARTIN	2	20	273	6	299
		6.7	91.3	2.0	14.0
		6.0	16.7	3.7	
HUANUCO-PASCO-UC	3	60	232	18	310
		19.4	74.8	5.8	14.5
		17.9	14.2	11.0	
CALLAO	4	26	198	2	226
		11.5	87.6	.9	10.6
		7.8	12.1	1.2	
ICA	5	107	181	6	294
		36.4	61.6	2.0	13.8
		31.9	11.1	3.7	
AREQUIPA	6	35	263	3	301
		11.6	87.4	1.0	14.1
		10.4	16.1	1.8	
PUNO	7	31	146	93	270
		11.5	54.1	34.4	12.7
		9.3	8.9	56.7	
AMCASH	8	29	187	4	220
		13.2	85.0	1.8	10.3
		8.7	11.4	2.4	
	COLUMN TOTAL	335	1635	164	2134
		15.7	76.6	7.7	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
489.45171	14	0.0	16.446	NONE

NUMBER OF MISSING OBSERVATIONS = 211

61

VAR001 REGION DE SALUD CROSSTABULATION OF VAR001 BY VAR159 TIPO TRANSPORTE PARA IR AL PROMOTOR

VAR001	COUNT / ROW PCT / COL PCT	VAR159 PIE (1)	MOVILIDA MESTIA D (2)	(3)	BICICLET MOTO A (4)	(5)	ROW TOTAL
PIURA-TUMBES	1	192 98.5 10.7			1 .5 2.3	2 1.0 100.0	195 10.4
SAN MARTIN	2	289 100.0 16.1					289 15.4
HUANUCO-PASCO-UC	3	249 98.8 13.9	1 .4 3.2		2 .8 4.5		252 13.4
CALLAO	4	204 98.6 11.4	1 .5 3.2		2 1.0 4.5		207 11.0
ICA	5	199 88.4 11.1			26 11.6 59.1		225 12.0
AREQUIPA	6	256 93.5 14.4	13 4.7 41.9	1 .4 50.0	4 1.4 9.1		276 14.7
PUNO	7	210 89.7 11.7	15 6.4 51.5	1 .4 50.0	7 3.0 15.9		234 12.5
ANCASH	8	195 99.0 10.9			2 1.0 4.5		197 10.5
	COLUMN TOTAL	1796 95.8	31 1.7	2 .1	44 2.3	2 .1	1875 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
196.99452	24	0.0	0.208	27 OF 40 (67.5%)

NUMBER OF MISSING OBSERVATIONS = 470

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR160 TIEMPO LLEGAR AL INFORMANTE

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR160 1	2	3	4	5	6	7	ROW TOTAL
PIURA-TUMBES	1	130 71.4 10.4	33 18.1 13.9	15 8.2 6.7	3 1.6 5.8	1 .5 4.5			182 10.1
SAN MARTIN	2	244 83.3 19.6	26 8.9 10.9	15 5.1 6.7	5 1.7 9.6	1 .3 4.5	2 .7 10.5		293 16.2
HUANUCO-PASCO-UC	3	119 48.2 9.6	30 12.1 12.6	74 30.0 32.9	7 2.8 13.5	6 2.4 27.3	9 3.6 47.4	2 .8 28.6	247 13.7
CALLAO	4	179 89.1 14.4	13 6.5 5.5	6 3.0 2.7			2 1.0 10.5	1 .5 14.3	201 11.1
ICA	5	177 89.4 14.2	16 8.1 6.7	4 2.0 1.8	1 .5 1.9				198 10.9
AREQUIPA	6	181 55.6 14.5	44 15.9 18.5	20 7.2 8.9	15 5.4 28.8	12 4.3 54.5	3 1.1 15.8	1 .4 14.3	278 15.3
PUNO	7	74 34.1 5.9	53 24.4 22.3	70 32.3 31.1	14 6.5 26.9	1 .5 4.5	3 1.4 15.8	2 .9 28.6	217 12.0
ANCASH	8	142 72.8 11.4	23 11.9 9.7	21 10.8 9.3	7 3.6 13.5	1 .5 4.5		1 .5 14.3	195 10.8
	COLUMN TOTAL	1246 68.9	239 13.2	225 12.4	52 2.9	22 1.2	19 1.1	7 .4	1809 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
402.07968	42	0.0000	0.704	24 OF 56 (42.9%)

NUMBER OF MISSING OBSERVATIONS = 536

6112

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR161 DEFINICION DE BOTIQUIN COMUNAL

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	1 MEDIC.PARA PRIM.	2 UN CAJON MEDICAM	3 DONDE RE DIC.PAR.	4 PAREC.A FARMACI	5 DONDE RE MED.COMP	6 MEDICAM. DEL PROM	7 MEDICIN. BAJO PRE	8 NO SABE	ROW TOTAL
PIURA-TUMBES	1	21	26	73	2	13	1	2	93	231
		9.1	11.3	31.6	.9	5.6	.4	.9	40.3	10.5
		12.9	9.4	13.1	2.2	12.3	4.2	3.3	10.2	
SAN MARTIN	2	17	12	55	3	8	4	6	175	290
		5.9	4.1	22.4	1.0	2.8	1.4	2.1	60.3	13.2
		10.4	4.3	11.7	3.3	7.5	16.7	9.8	19.1	
HUANUCO-PASCO-UC	3	18	44	87	11	16		10	127	313
		5.8	14.1	27.8	3.5	5.1		3.2	40.6	14.3
		11.0	15.9	15.6	12.1	15.1		16.4	13.9	
CALLAO	4	48	79	77	14	29		6	32	285
		16.8	27.7	27.0	4.9	10.2		2.1	11.2	13.0
		29.4	28.5	13.8	15.4	27.4		9.8	3.5	
ICA	5	24	43	68	16	22	2	9	104	288
		8.3	14.9	23.6	5.6	7.6	.7	3.1	36.1	13.1
		14.7	15.5	12.2	17.6	20.8	8.3	14.8	11.4	
AREQUIPA	6	16	40	57	21	12		12	136	294
		5.4	13.6	19.4	7.1	4.1		4.1	46.3	13.4
		9.8	14.4	10.3	23.1	11.3		19.7	14.8	
PUNO	7	4	20	55	11			3	187	280
		1.4	7.1	19.6	3.9			1.1	66.8	12.8
		2.5	7.2	9.9	12.1			4.9	20.4	
ANCASH	8	15	13	74	13	6	17	13	62	213
		7.0	6.1	34.7	6.1	2.8	8.0	6.1	29.1	9.7
		9.2	4.7	13.3	14.3	5.7	70.8	21.3	6.8	
	COLUMN TOTAL	163	277	556	91	106	24	61	916	2194
		7.4	12.6	25.3	4.1	4.8	1.1	2.8	41.8	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
486.96401	49	0.0000	2.330	8 OF 64 (12.5%)

NUMBER OF MISSING OBSERVATIONS = 151

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR162 BOTIQUIN COMUNAL EN LA COMUNIDAD

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR162 SI (1)	NO (2)	NO SABE (3)	ROW TOTAL
PIURA-TUMBES	1	70 32.0 13.6	104 47.5 7.8	45 20.5 23.4	219 10.7
SAN MARTIN	2	92 37.2 17.9	133 53.8 9.9	22 8.9 11.5	247 12.1
HUANUCO-PASCO-JC	3	82 26.4 16.0	205 65.9 15.3	24 7.7 12.5	311 15.2
CALLAO	4	67 23.6 13.1	198 69.7 14.8	19 6.7 9.9	284 13.9
ICA	5	39 13.3 7.6	195 66.3 14.5	60 20.4 31.3	294 14.4
AREQUIPA	6	25 8.6 4.9	253 86.6 18.9	14 4.8 7.3	292 14.3
PUNO	7	12 6.5 2.3	166 90.2 12.4	6 3.3 3.1	184 9.0
ANCASH	8	126 59.7 24.6	83 39.3 6.2	2 .9 1.0	211 10.3
	COLUMN TOTAL	513 25.1	1337 65.5	192 9.4	2042 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
369.16900	14	0.0	17.301	NONE

NUMBER OF MISSING OBSERVATIONS = 303

CROSSTABULATION OF

VAR001 REGION DE SALUD BY VAR163 TIEMPO DE TENER BOTIQUIN

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR163 1	2	3	4	5	ROW TOTAL
PIURA-TUMBES	1	22 31.0 25.9	8 11.3 12.3	17 23.9 11.0	19 26.8 9.0	5 7.0 14.3	71 12.9
SAN MARTIN	2	11 12.0 12.9	17 18.5 26.2	27 29.3 17.5	35 38.0 16.6	2 2.2 5.7	92 16.7
HUANUCO-PASCO-UC	3	24 28.9 28.2	4 4.8 6.2	38 45.8 24.7	12 14.5 5.7	5 6.0 14.3	83 15.1
CALLAO	4	4 5.3 4.7	5 6.7 7.7	35 46.7 22.7	20 26.7 9.5	11 14.7 31.4	75 13.6
ICA	5	2 7.1 2.4		22 78.6 14.3	2 7.1 .9	2 7.1 5.7	28 5.1
AREQUIPA	6	6 14.6 7.1	14 34.1 21.5	6 14.6 3.9	12 29.3 5.7	3 7.3 8.6	41 7.5
PUNO	7	5 18.5 5.9	10 37.0 15.4	6 22.2 3.9	4 14.8 1.9	2 7.4 5.7	27 4.9
ANCASH	8	11 8.3 12.9	7 5.3 10.8	3 2.3 1.9	107 80.5 50.7	5 3.8 14.3	133 24.2
	COLUMN TOTAL	85 15.5	65 11.8	154 28.0	211 38.4	35 6.4	550 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
263.25507	28	0.0	1.718	10 OF 40 (25.0%)

NUMBER OF MISSING OBSERVATIONS = 1795

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR164 USO DE BOTIQUIN POR EL INFORMANTE

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR164 SI (1)	VAR164 NO (2)	ROW TOTAL
PIURA-TUMBES	1	34	46	80
		42.5	57.5	13.4
		10.0	17.8	
SAN MARTIN	2	84	16	100
		84.0	16.0	16.7
		24.6	6.2	
HUANUCO-PASCO-UC	3	55	37	92
		59.8	40.2	15.4
		16.1	14.3	
CALLAO	4	31	32	63
		49.2	50.8	10.5
		9.1	12.4	
ICA	5	26	67	93
		28.0	72.0	15.5
		7.6	26.0	
AREQUIPA	6	14	18	32
		43.8	56.3	5.3
		4.1	7.0	
PUNO	7	4	11	15
		26.7	73.3	2.5
		1.2	4.3	
ANCASH	8	93	31	124
		75.0	25.0	20.7
		27.3	12.0	
	COLUMN TOTAL	341	258	599
		56.9	43.1	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
94.73767	7	0.0000	6.461	NONE

NUMBER OF MISSING OBSERVATIONS = 1746

616

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR165 RAZON POR CERRAR EL BOTIQUIN

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR165 1 NO SABE	2 FALTA DE DINERO	3 FALTA DE MEDICIN	4	6	8	ROW TOTAL
PIURA-TUMBES	1	51 75.0 45.9	11 16.2 39.3	5 7.4 25.0	1 1.5 2.7			68 33.8
SAN MARTIN	2	12 80.0 10.8	1 6.7 3.6	2 13.3 10.0				15 7.5
HUANUCO-PASCO-UC	3	5 25.0 4.5	10 50.0 35.7		1 5.0 2.7		4 20.0 100.0	20 10.0
CALLAO	4	4 19.0 3.6	1 4.8 3.6	11 52.4 55.0	5 23.8 13.5			21 10.4
ICA	5	11 33.3 9.9		1 3.0 5.0	20 60.6 54.1	1 3.0 100.0		33 16.4
AREQUIPA	6	14 87.5 12.6		1 6.3 5.0	1 6.3 2.7			16 8.0
PUNO	7	9 75.0 8.1	3 25.0 10.7					12 6.0
ANCASH	8	5 31.3 4.5	2 12.5 7.1		9 56.3 24.3			16 8.0
	COLUMN TOTAL	111 55.2	28 13.9	20 10.0	37 18.4	1 .5	4 2.0	201 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
201.84350	35	0.0000	0.060	36 OF 48 (75.0%)

NUMBER OF MISSING OBSERVATIONS = 2144

67

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR207 MEJORAR AYUDA DEL PROMOTOR

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR207: 1 MAS CAPA PAGARLE CITACION	2 MAS EQUIPO	3 MAS TIEMPO	4 OTRA PERSONA	5	6	8	ROW TOTAL
PIURA-TUMBES	1	133 62.4 9.7	42 19.7 14.9	30 14.1 17.2	3 1.4 16.7	3 1.4 2.0		2 .9 8.3	213 10.4
SAN MARTIN	2	151 58.8 11.0	49 19.1 17.4	39 15.2 22.4	3 1.2 16.7	14 5.4 9.2		1 .4 4.2	257 12.5
HUANUCO-PASCO-UC	3	192 67.8 14.0	37 13.1 13.1	20 7.1 11.5	3 1.1 16.7	23 8.1 15.1	5 1.8 15.6	3 1.1 12.5	283 13.8
CALLAO	4	216 81.8 15.7	14 5.3 5.0	22 8.3 12.6		10 3.8 6.6	1 .4 3.1	1 .4 4.2	264 12.9
ICA	5	174 65.9 12.7	35 13.3 12.4	12 4.5 6.9	1 .4 5.6	15 5.7 9.9	11 4.2 34.4	16 6.1 66.7	264 12.9
AREQUIPA	6	172 59.5 12.5	60 20.8 21.3	18 6.2 10.3	7 2.4 38.9	27 9.3 17.8	4 1.4 12.5	1 .3 4.2	289 14.1
PUNO	7	202 74.8 14.7	27 10.0 9.6	12 4.4 6.9		22 8.1 14.5	7 2.6 21.9		270 13.1
ANCASH	8	132 61.7 9.6	18 8.4 6.4	21 9.8 12.1	1 .5 5.6	38 17.8 25.0	4 1.9 12.5		214 10.4
	COLUMN TOTAL	1372 66.8	282 13.7	174 8.5	18 .9	152 7.4	32 1.6	24 1.2	2054 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
247.04601	42	0.0000	1.867	24 OF 56 (42.9%)

NUMBER OF MISSING OBSERVATIONS = 291

612

C R O S S T A B U L A T I O N O F

VAR001 REGION DE SALUD BY VAR208 PROBLEMAS MAS IMPORTANTES DE LA COMUNID

PAGE 1 OF 1

VAR001	COUNT / ROW PCT / COL PCT	VAR208 1 ECONOMICOS	2 FALTA DE CAMINOS	3 FALTA DE SERV.SA	4 ABUSO D AUTORIDA	5 EDUCACION	6 FALTA IN FRAESTRU	7 DELINCUENCIA-DRO	8 OTROS	10	ROW TOTAL
PIURA-TUMBES	1	34	9	51	2	4	129	4	2		235
		14.5	3.8	21.7	.9	1.7	54.9	1.7	.9		11.2
		9.3	10.6	10.0	18.2	7.1	12.6	36.4	7.1		
SAN MARTIN	2	15	9	75	2	13	106		6	1	227
		6.6	4.0	33.0	.9	5.7	46.7		2.6	.4	10.8
		4.1	10.6	14.7	18.2	23.2	10.4		21.4	16.7	
HUANUCO-PASCO-UC	3	107	23	67		9	86		1		293
		36.5	7.8	22.9		3.1	29.4		.3		14.0
		29.2	27.1	13.1		16.1	8.4		3.6		
CALLAO	4	19	24	51	2	15	145	4	4	3	277
		6.9	8.7	22.0	.7	5.4	52.3	1.4	1.4	1.1	13.2
		5.2	28.2	12.0	18.2	26.8	14.2	36.4	14.3	50.0	
ICA	5	25	4	59	2	6	176	1	6		289
		8.7	1.4	23.9	.7	2.1	60.9	.3	2.1		13.8
		6.8	4.7	13.5	18.2	10.7	17.2	9.1	21.4		
AREQUIPA	6	17	7	48		1	175	1	3	2	294
		5.8	2.4	29.9		.3	59.5	.3	1.0	.7	14.0
		4.6	8.2	17.3		1.8	17.1	9.1	10.7	33.3	
PUNO	7	145	4	49	2	1	62	1	3		268
		54.1	1.5	18.3	.7	.4	23.1	.4	1.1		12.8
		39.8	4.7	9.6	18.2	1.8	6.1	9.1	10.7		
ANCASH	8	4	5	50	1	7	143		3		213
		1.9	2.3	23.5	.5	3.3	67.1		1.4		10.2
		1.1	5.9	9.8	9.1	12.5	14.0		10.7		
	COLUMN TOTAL	367	85	510	11	56	1022	11	28	6	2096
		17.5	4.1	24.3	.5	2.7	48.8	.5	1.3	.3	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
583.49208	56	0.0000	0.610	32 OF 72 (44.4%)

NUMBER OF MISSING OBSERVATIONS = 249

VAR001 REGION DE SALUD — C R O S S T A B U L A T I O N O F — BY VAR209 GRADO DE COOPERACION

VAR001	COUNT / ROW PCT / COL PCT	VAR209 MUY BUEN 10	BUENO 11	REGULAR 21	MALO 31	ROW TOTAL 41
PIURA-TUMBES	1	26 10.4 16.5	92 36.8 8.4	117 46.8 12.7	15 6.0 20.5	250 11.1
SAN MARTIN	2	7 2.4 4.4	117 40.3 10.6	149 51.4 16.2	17 5.9 23.3	290 12.9
HUANUCO-PASCO-UC	3	24 7.1 15.2	151 44.9 13.7	143 42.6 15.6	18 5.4 24.7	336 14.9
CALLAO	4	17 5.9 10.8	149 51.7 13.5	118 41.0 12.9	4 1.4 5.5	288 12.8
ICA	5	9 3.1 5.7	164 56.4 14.9	108 37.1 11.8	10 3.4 13.7	291 12.9
AREQUIPA	6	25 8.4 15.8	152 50.8 13.8	121 40.5 13.2	1 .3 1.4	299 13.3
PUNO	7	29 10.5 18.4	150 54.5 13.6	91 33.1 9.9	5 1.8 6.8	275 12.2
ANCASH	8	21 9.5 13.3	126 57.0 11.4	71 32.1 7.7	3 1.4 4.1	221 9.8
	COLUMN TOTAL	158 7.0	1101 48.9	918 40.8	73 3.2	2250 100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
100.09663	21	0.0000	7.170	NONE

NUMBER OF MISSING OBSERVATIONS = 95

020

CASE STUDIES

The primary objective of intensive observation of the practice of promoters is to understand the dynamics of the multiple variables that influence the ability of the promoter to provide health services. To insure a uniform method of investigation among the study regions, a case study format was devised. As shown in Appendix I, the "Themes for Case Studies" focused on ten main topics. These were:

A. Background information on the promoter training program in the area,
B. The promoter's daily schedule,
C. The promoter's life history,
D. The promoter's self-image as a health provider,
E. The promoter's interaction with other health providers and MOH personnel,
F. Community interaction.
G. Economic issues, such as cost of drug supplies,
H. The promoter's view of training experiences and refresher activities,
I. Incentives, and
J. Plans to continue work as a promoter.

CASE STUDY, DEPARTMENT OF SAN MARTIN

A. Background Information

The case study in San Martin illustrates the variety of social, cultural, logistic, and economic variables that affect the promoter's ability to provide health services. The major findings of this case study point to the important role played by the sanitario in determining promoter job satisfaction and insuring the quality of care he is able to provide. In addition, this study points out the very delicate relationship that exists between formal and informal health providers. While the main subjects of this case study are indigenous Aguarunas, the findings can be extended to non-indigenous health promoters living in the same area since the economic, logistical, and ecological constraints operating upon the Aguaruna promoters are identical to those face by their mestizo neighbors. Even the utilization of formal and informal health resources to treat a single complaint is common to both mestizo and Indian.

The Department of San Martin is located in an ecological zone called the ceja de la selva or "eyebrow of the jungle." It is located directly to the east of the high coastal mountains. Even though the area is considered as part of the tropical forest, due to its altitude of 1,500-8,000 feet above sea level, the climate is not as hot or humid as the lower jungle. For a complete description of the ecological features, health statistics, and population statistics of this area, please refer to the Plan Operativo, Región de Salud de San Martin. The most significant characteristics of the area, relative to the delivery of health care, are the following:

1. Due to the fertility of the soil, its depth, the availability of water, and the presence of a well-developed system of transportation, the Belaunde's government has been trying to encourage the migration of land-hungry highland people into the area. This has resulted in a migration rate higher than the national average, estimated at 5.2% annually (Plan de Ejecución del Proyecto de Desarrollo Rural Integrado del Alto Huallaga 1981).

2. A high rate of rainfall which makes rural roads almost impassable during the rainy season.

3. An increase in rice production during the last ten years which has led to the clearing of forest lands favoring the breeding of the Anopheles mosquito, the insect vector of malaria.

4. The lack of reliable public transportation to transport critically ill patients to higher level MOH health facilities.

5. The strong presence of informal medical practitioners in rural and urban settings.

The selection of the promoter for the case study was done during the initial visit to San Martin that took place between February 11-14. For a list of daily activities performed during the case study please see the appendix. The major criterion used to determine informant selection was the rate of activity as measured by monthly reports sent into area hospitals. Since the major proportion of the Peruvian population is composed of the following mayor groups- coastal mestizo (Spanish speakers), southern highland (predominately Spanish and Quechua speakers), north-central highland (Spanish and Quechua speakers), and tropical forest Indians (Spanish and indigenous language speakers), it was felt that the case studies should be representative of the multicultural characteristics of the Peruvian population. Therefore, the second determinant of promoter selection was membership in a lowland indigenous population. During the two month period in which the promoter program was active in the hospital area of Moyobamba-Rioja, the average numbers of patients treated per month was about 12-15. The promoter selected as the primary informant in the case study was highly recommended by the local sanitario and characterized as a hard working responsible person.

After discussions with the sanitario and local health officials, the promoter of Shampuyacu was selected as the primary informant of the study. The target community of Shampuyacu contains approximately 175 people. It is part of the Organización Aguaruna Alto Mayo (OAAM) located in an area called the Alto Mayo. This organization consists of nine communities inhabited entirely by a population of approximately 2,500 Aguaruna Indians (see map 1). The OAAM controls all major aspects of the economic, political, and social life of the comuneros through a legislative body called the Asamblea. The Aguaruna, although beginning to enter into the market system through their cultivation of rice as a cash crop have subsisted, traditionally, on a diet predominated by the consumption of manioc or yuca. Animal protein is still obtained by hunting for wild game and fishing in large rivers such as the Naranjillo, the Yuracyacu, and the Mayo. The majority of the population continue to live in a dispersed settlement pattern that has traditionally tended to reduce intra-community hostilities. While it may be true that in the past a dispersed settlement pattern contributed toward harmonious community life, it does lead to problems in the delivery of medical care. This is a particularly significant problem for the sanitaria, since individuals houses can

be as far apart as a four hour walk. During vaccination programs, house visits, and the yearly census of the population the sanitaria must leave her duties at the Health Post in order to visit the houses in the community. Since there is no auxiliary at the Health Post during these times, a notice is posted on the door of the Health Post explaining that services are temporarily discontinued.

B. The Promoter's Self-Image as a Health Provider

The case study was initiated by a formal meeting conducted in the house of the head of the community of Shampuyacu. The participants in this meeting were the head of the community, myself, the sanitaria, and various members of the household of the head of the community. During this meeting the head of the community was asked to comment on his reaction to the presence of a trained Health promoter in his community and a variety of questions concerning the reaction of the community to the promoter's services. The promoter of Shampuyacu was elected by a thirty member asamblea. There have been no major problems in the community with the delivery of health services by the promoter. The only complaints voiced by the villagers concerning the promoter were regarding the lack of a schedule for his services. People complain that they sometimes cannot find the promoter when they need him. There is no comité de salud in the community. However, the area hospital staff is trying to organize the formation of comités de salud in all communities. In response to pressure from the sanitaria, the head of the community is trying to find people to serve on the comité de salud. The major complaint voiced by the head of the community was the insufficient amount of medicine that the promoter had to treat the health problems of the members of his community. Other problems mentioned were:

1. the lack of equipment given to the promoter. (For example, the promoter is not given a scale to weigh the babies when they are born)

2. the need for the promoter to have more training,

3. the inaction of the MOH to help build a potable water system,

4. the lack of MOH monetary reimbursement for the promoter's time,

5. and the need for the MOH to supply them with building materials so that they can construct a permanent Health Post for the promoter.

The head of the community concluded the interview saying that "if the doctors don't respond to our needs we are going to go to the hospital and grab them."

The next day I began visits with the health promoter. Since he was engaged in the rice harvest during the time I spent with him, interviews were conducted mainly in the afternoons and during the weekends when he was not working in the rice fields. Patients were aware that he was working in the rice fields and they consulted him only in the afternoons. The promoter attended patients in his house; there was no posted schedule of service. The promoter was a 23 year old male; he was married and had one son. The most important findings of the written interview, I used one of the promoter questionnaires, are the following items:

1. He took the course because he has always been interested in health.

2. He has given talks on environmental sanitation and helped in the construction of two latrines.

3. He knew the timings and dosages of vaccinations without referring to any printed material.

4. He kept his medicines in a suitcase in one corner of the room. The instruments looked used by well cared for.

5. He kept a reference book of material copied from his promoter's course. The book contained information on environmental hygiene, treatment of common ailments, and anatomy.

6. There was no doubt expressed by the promoter about wanting to continue his activities as a health promoter. His main reason for continuing his work is that he "feels that I am helping my community."

During the visits, I checked the promoter's equipment and made a record of the patients attended during the two months of the promoter's practice, as well as his drug sales and supply (see Table 1).

TABLE 1. PROMOTER'S LIST OF ACTIVITES PERFORMED DURING JANUARY AND FEBRUARY 1984. SHAMBUYACU, DISTRICT OF RIOJA, DEPARTMENT OF SAN MARTIN* (N = 30)

Patient Complaint	Treatment	Source	Cost
nasal bleeding	coagulante amp.	local pharmacy	
rheumatism	allergan 5mg.	Health Post	1,500
asthma	broncol 3mg.	local pharmacy	
bronchitis	broncocina 5mg	local pharmacy	
uta	repochal	local pharmacy	
wound infection	megacilina	Health Post	1,700
vaginal bleeding	ergotrate amp.	local pharmacy	
wound bleeding	coagulante amp.	local pharmacy	
bronchitis	broncol 3mg.	local pharmacy	
bronchial asthma	broncocina amp.	local pharmacy	
intestinal cramps	buscapina	local pharmacy	
weakness	vitamin tonic	Health Post	1,000
paretitis	tantum amp.	Health Post	1,000
"hinchazones"	tantum amp.	Health Post	1,000
diarrhea with vomiting	quimicilina	Local Pharmacy	
paretitis	tantum amp.	Health Post	1,000
diarrhea with vomiting	quimicilina	local pharmacy	
grippe with cold	tetraciclina amp.	local pharmacy	
intestinal cramps	dexicilina	Health Post	3,000
intestinal cramps	dexicilina	Health Post	3,000
dysentery	dexicilina	Health Post	3,000
common cold	aspirin	local pharmacy	
bronchitis	tetraciclina amp.	local pharmacy	
fungus infection	aseptil rojo	local pharmacy	
bronchitis	bronchol	local pharmacy	
rheumatism	kenacol	Health Post	1,850
rheumatism	kenacol	Health Post	1,850
common cold	tantum amp.	Health Post	1,000
bronchitis	gentabiotic	Health Post	1,600
bronchial asthma	gentabiotic	Health Post	1,600
bronchial asthma	ampicilina	local pharmacy	

* The names of the ailments and drugs were copied directly from the promoter's notes. Prices for drugs purchased at local pharmacies were unknown; these were brought by the patient to be injected or administered by the promoter.

Of the 30 treatment cases presented in Table 1, 14 were provided to the promoter from the posta médica drug supply that had been obtained from the regional hospital of Rioja by the sanitario. The remaining drugs were inyectables brought to the promoter by patients for administration. The total cost of the drug supply kept by the promoter was estimated at s101,690. These drugs were given to the promoter two months ago when he began his practice (see Table 2).

There is a very strong association between the promoters and the sanitario at the Health Post located at Bajo Naranjillo. The sanitario often expressed concern over the performance of the promoters under her supervision. It is for that reason that the sanitaria has provided the promoters with drugs from the supply at the Health Post. She feels that the work performed by the promoters eases her burden in caring for the people in the area. The three communities under her supervision are relatively isolated. They are difficult to reach by foot and there is no public transportation available. For this reason, the sanitaria feels that the promoter program is perfectly suited to the needs of the population that she serves. At this point, there are only trained Aguaruna promoters in the area of the city of Naranjillo; however, the clientele of the Health Post includes Spanish speakers living beyond the borders of the Indian territory as well as Aguarunas.

During the time that I spent observing the daily routine of the promoter of Shampuyacu I did not notice any serious problems with the delivery of health services. Although his patient load was not heavy, he was well thought of by the community members. During the five days time that I spent observing his practice no patients came to his house for medical treatment. This is a reflection of the relatively small number of patients attended by promoters throughout the area. As stated above, the promoter sees approximately twelve to fifteen patients per month. To check to see if the patients were using the services of the sanitario rather than seek help from the promoter I checked the records of the Health Post and found that during the two months that the promoter was practicing only 6 patients came to see the sanitario. They came for rather routine complains, such as common colds, and conjunctivitis. Considering that there is a lot of visiting between the communities, it is quite possible that the patients came to the Health Post because they were in the area and not because they preferred the services of the sanitario.

Even though I was not able to personally observe the promoter performing routine medical treatment in the community, I was able to witness an interesting case of interaction between three levels of local medical care. During one of the days that I spent with the promoter he told me that a member of the community was ill with severe diarrhea and vomiting. The patient's relatives were convinced that the vomiting and diarrhea were caused by witchcraft. They had arranged for a treatment session with a local traditional healer, referred to by them as a brujo Since I knew the healer, I asked his permission to observe the session. Permission was granted to me and I went with the promoter, and the sanitario to observe the healing session. It took place at night in the house of the traditional healer. Aside from the patient from the promoter's village there were three other patients from other communities. The promoter's patient was an elderly lady; she appeared to be well over sixty years of age. The procedure used to extract the witchcraft from the patient was performed while the curer was under the effects of a heavy dose of ayahuasca (a hallucinogenic drug extracted from the leaves of the plant Banisteriopsis caapi). After the session was over, the curer pronounced that the witchcraft had been removed and the patient could be given western drugs.

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The next day I accompanied the promoter and the patient to the Health Post. The promoter said that the patient's illness was beyond his level of knowledge and skill. When the sanitario examined the patient she found that the patient had no blood pressure. The patient was placed on a makeshift bed in one of the rooms of the Health Post and one of the patient's family members was given a prescription for drugs to be purchased from the pharmacy located in the city of Nuevo Cajamarca (a trip, by car, of approximately 30 minutes). The family members had no money to pay for the drugs so they asked the head of the community to lend them the money. After the drugs were purchased, the sanitario watched as the promoter inserted the needle into the patient's vein through which a continuous intravenous drip delivered the drug to the patient. I later heard that the patient had recovered from this crisis.

While there did not seem to be any problems associated with the delivery of medical care by the promoter of Shampuyacu, I heard that the promoter trained for the community of Alto Naranjillo was having some problems. I visited the community of Alto Naranjillo and discussed this problem during a meeting with the head of the community of Alto Naranjillo, the promoter of Alto Naranjillo, and the sanitario. The interview disclosed an example of community non-acceptance of a trained promoter. Because of witchcraft allegations, the trained promoter could not function in the community. The people believe that he casts a spell over the medicines, causing the medicines to become vehicles by which he bewitches the people of the community. Continued interrogations of the promoter, the head of the community, and the sanitario during that day and additional information obtained from the promoter's brother taken at a later date, reveal that the cause of the problem was that the promoter was not chosen by the community. He had been selected by his own brother, who was the vice-president of the OAMM. The promoter himself felt very bad; he said: "Estoy un poco triste porque toda la comunidad está en contra de mí, ya que no van a acudir a mí; ya que me están observando como si fuera brujo." Since the promoter was not going to be able to continue his practice, the sanitaria removed the drugs that she had given to him and returned them to the drug suplly of the Health Post. She left the instruments and the promoter's bag in the community to be given to the next promoter, who will be selected by a community vote. The total value of the inventory of drugs kept at the home of the promoter was estimated at 95,810 soles (see Table 3).

TABLE 2. DRUG SUPPLY KEPT BY THE PROMOTER OF SHAMPUYACU

Drug	Quantity	Cost	Total Cost	Indication*
Palo Neurobin	26 pills	250 ea.	6,500	
Primosyston	3 vials	1600 ea.	4,800	
Flagyl	2 bottles	3500 ea.	7,000	
Bisilvon				
Ampicilina	2 bottles	7500 ea.	15,000	
Hemotrofin	2 bottles	7500 ea.	15,000	
Bio-Quin	2 bottles	2950 ea.	5,900	
Buscapina	2 bottles	6300 ea.	12,600	
Visadron	2 bottles	1200 ea.	2,400	
Kenacort	3 vials	2500 ea.	7,500	rheumatism
Gentabiotic	3 vials	1200 ea.	3,600	infection and bronchial pneumonia
Tantum	3 vials	1000 ea.	3,000	fever
Sistaljina	1 vial	1750 ea.	1,750	rheumatism
Sanitropina	2 bottles	1100 ea.	2,200	colic and gas
Gasiovet	1 bottle	1950 ea.	1,950	gas
Antalgina	29 pills	100 ea.	2,900	pain and fever
BiNeurisoma	one tube	5290 ea.	5,290	chloasma
Mobilisin	one tube	4300 ea.	4,300	rheumatism

* Incomplete information. I have written the list as it was given to me by the sanitario.

TABLE 3. PROMOTER, ALTO NARANJILLO: DRUG SUPPLY

Drug	Quantity	Unit Cost	Total Cost	Indication
Palo Neurobin	36 pills	200 ea.	7,200	n.d.
Sistaljina	2 vials	5000 ea.	10,000	colic
Dexocilina	2 vials	3100 ea.	6,200	infection
Mobilicina	2 tubes	4350 ea.	8,700	rheumatism
Binerisona	2 tubes	5295 ea.	10,590	chloasma
Primosiston	3 vials	1500 ea.	4,500	hemorrhage
Bio-Quin (children)	3 bottles	2000 ea.	6,000	cough
Bio-Quin (adults)	2 bottles	2890 ea.	5,789	cough
Revein	1 vial	1190 ea.	1,190	bronchial pneumonia
Calceirol	1 bottle	1190 ea.	1,190	anemia
Megacilina	3 vials	1200 ea.	3,600	infection
Berbental	1 bottle	1200 ea.	1,200	vomiting
Hentalbiotic	4 vials	1500 ea.	6,000	n.d.
Hepabion	4 vials	1500 ea.	6,000	n.d.
Altalgina	1 bottle	1000 ea.	1,000	n.d.
Broncobiot	1 vial	3950	3,950	n.d.
Digestoase	2 bottles	2000 ea.	4,000	n.d.
Diarpen	2 vials	1300 ea.	2,600	n.d.

C. MOH Perspective on the Operation of the Promoter Program in the Hospital Area of Moyobamba-Rioja

After the case studies were completed, arrangements were made to spend two days interviewing MOH personnel directly responsible for the promoter training program at the area hospital de Moyobamba. On April 4 I met with the Chief Nurse of the area and the Nurse Coordinator of the AID projects 219 and 230. In their view, the major problems faced by promoter program supervisers are:

1. Lack of medicines to give to promoters. The case of the sanitaria of the health post at Bajo Naranjillo, is exceptional; no other sanitarios shared their supply of drugs with the promoters. The nurses felt that there was a lack of trust on the part of the sanitarios in the abilities of the promoters to keep good records of drugs sold.

2. Promoters are either not turning in their reports to the sanitarios or the sanitarios are not turning in promoter reports to the area hospital. Either way, the result is that the area hospital has received reports from only 9 out of the 22 promoters trained.

3. The promoters trained in the last training session did not receive any drugs.

4. The comités de salud are not functioning the way that they were intended to function. This could be because of lack of drugs, but it seems that community spirit demonstrated in the case study in Ancash, is not typical of the villages and communities within the jurisdiction of the area hospital of Moyobamba. This could be a reflection of the non-permanent nature of the inhabitants of the area. These communities are formed of migrants from a variety of highland and coastal areas; thus, a communal organization, such as a comité de salud, is an imposed rather than a natural feature.

5. There has only been one case of promoter desertion. The cause of this desertion is similar to the problem with the Aguaruna promoter of Alto Naranjillo, in that the promoter was not selected by the community but rather was a relative of one of the community leaders.

6. Area hospitals do not get sufficient notice from AID to go through the required procedures to find promoters. For example, on 24 March 1984, the area hospital staff was notified about the availability of money for a promoter training course that was to take place on 16 April 1984. They had less than a month to notify sanitarios to find qualified participants. Another problem was that the area hospital staff was not told the amount of money that they had to spend. And thus had no idea of how many promoters they could train in this course.

7 The nurses sympathized with the chronic shortage of money suffered by the promoters in their area. Promoters do not have the money to pay for transportation when they have to bring their patients into the hospital, or when they have to go to the city to buy drugs.

8. One of the most difficult problems faced by the area hospital staff is the shortage of money to buy equipment. Because of the time delay between the date when the instruments are ordered and the date that the check arrives and the instruments can be purchased, inflation erodes purchasing power and affects the

content of orders. A calculation of the cost of the equipment listed in the Plan Operativo for San Martin 1982, versus the actual cost of the instruments when actually purchased in 1983 (see Table 4) shows a rise in price of 50%.

9. Another problem with equipment is that there has been a steady decrease in the amount of equipment given to the promoters. According to the Plan Operativo of the Department of San Martin 1980, promoters were to be given the following equipment, in addition to the equipment listed in Table 4:

lámina porta objeto
jeringa hipodérmica 20 cm.
aguja hipodérmica de 22 cm.
aguja de sutura recta
porta agujas
aguja de sutura circular redonda
aguja de sutura circular cortante

10. There are 20 candidates who have been selected to participate in the training course to be given on April 16, 1984. Yet the staff of the area hospital did not know at the time of the interview, April 4-5, how many promoters could be trained because this information was not provided from Tarapoto. It may be that some of the promoters who have been waiting to take the course will be unable to take it, unless they can come up with their own money from room and board during the training sessions.

TABLE 4. EQUIPMENT GIVEN TO PROMOTERS IN THE HOSPITAL AREA OF MOYOBAMBA-RIOJA, 1983

Item	Price
1 termómetro oral con estuche	1,600
1 termómetro rectal	1,600
2 jeringas hipodérmicas de vidrio x 5 cm.	2,100
2 jeringas hipodérmicas de vidrio x 10 cm.	2,650
12 agujas hipodérmicas no. 18 x 1½	130
12 agujas hipodérmicas no. 21 x ½	120
1 tijera recta de 13 cm.	5,450
1 pinza kocher de 14 cm.	7,952
1 pinza kelly de 14 cm.	6,650
1 cubeta con tapa de 30 x 35 cm.	40,800
1 cepillo de plástico para manos	3,200
1 maletín de cuero, tamaño mediano	15,500
1 primus marca Fram a kerosene	20,500
2 ollas de aluminio no. 16 con tapa	3,800
1 par pilas t/q. para linterna	795
1 linterna marca "tigre," tamaño mediano	3,500
1 cinta métrica x 150 cm.	416

These items are for a single promoter. The area hospital purchased 18 sets for their 1983 program.

CASE STUDY, DEPARTMENT OF ANCASH

A. Background Information

The results of the case study in the Department of Ancash point out the important role played by regional MOH administrative policies, community involvement, and promoter activity in determining the effectiveness of the promoter program. Between 1979-1982, the Department of Ancash was regarded as a model of progress in primary health care projects. There are a variety of reasons why these programs took root and began to grow so rapidly in this region. First, and perhaps most important, is the administrative infrastructure of the region, set up to handle the health needs of the population after the devastation to human life and property caused by the earthquake that destroyed a significant percentage of the standing structures of the major populated areas in the early 70s. With the human and economic resources made available by international agencies, roads were built, the regional hospital of Huaráz was renovated, and several small area hospitals were constructed. Along with this international effort was a significant desire on the part of the people of the area to re-build their cities and help the refugees left homeless by the earthquake.

The significant aspects of the geography, ecology, and ethnography that affect the results of the promoter program in the Department of Ancash are:

1. The most important geographical feature of the area are the high, tectonically unstable mountain ranges, the Cordillera Blanca and the Cordillera Negra. In terms of human settlement, the difference between these two mountain ranges is the relative availability of water for agriculture. The settlements located on the side of the Cordillera Blanca never have problems with ground water, whereas the settlements located on the side of the Cordillera Negra face continual water shortages. This means that, without man-made irrigation systems, farmers on the Cordillera Negra rely totallly on rain water for crop irrigation. They have only one corn harvest a year.

2. The people of the rural areas speak Quechua. There is a tendency for males to be more fluent in Spanish due to a greater need for interaction with Spanish-speaking businessmen. Females are almost totally monolingual in Quechua.

3. Economic pressure, due to a variety of factors such as poor harvests or inflation, tend to result in population movements out of highland areas and into the coast. While some of the migrants do send money back to their families, the desertion of young wives and children is not uncommon.

B. MOH Perspectives on the Operation of the Promoter Program

The objective of the case study was to find qualitative and quantitative variables that affect the operation of the promoter program. The first step taken was to interview the Coordinator of Primary Health Care Programs and a nurse of the Department of Epidemiology. Since both of these individuals had been associated with the promoter program since 1979, their knowledge of the program's operation was particularly important. After discussing the choice of a key informant for the case study, I asked them to give me an appraisal of the current operations of the program and how it had changed through the years they had been involved with it. The following is a summary of this discussion:

1. Current Problems

   a. Money. The major concern was the delay in receiving funds.

   b. Promoter's reporting. It is impossible to assess the quality of promoter's compliance with reporting requirements, since the department does not have enough money to print promoters' reporting forms.

   c. Drugs. There is distress concerning discrepancies between drug orders and what is eventually received from AID; Table 5 lists the drugs ordered, Table 6 the drugs received. The problem is that some of the drugs delivered are unacceptable; for example, penicilina potasica is considered dangerous and even doctors will not use it. Another problem is that no records are kept on promoter's drug utilization: promoters were given an initial supply of drugs from the sales of which they were supposed to maintain their supply. The absence of records makes both maintenance and evaluation difficult.

   d. Supervision. Out of the entire budget of s55,325,305, only 494,403 was allocated to the costs of supervision (See Appendix II). This amount was spent for one supervisory trip to Chimbote. At the time of this interview, there was absolutely no money available to visit promoters. In fact, the interviewees had not personally seen my key informant for one year, due to lack of travel funds.

   e. Family planning materials. None are available.

   f. Promoter desertion. The primary reason given was lack of supplies; lack of economic incentives was given as the secondary explanation.

   g. Competition between sanitarios-doctors-promoters. There was no perception that there was any problem among these health providers. The only problem mentioned was that the doctors think that the promoters over-administer antibiotics.

   h. Limitations in promoter's medical skills. While more advanced techniques, such as suturing, intravenous injections, and minor surgery, are not taught to promoters, regional health personnel are perfectly aware that some promoters are performing these interventions; one of the interviewees commented that in fact, one of the doctors at a local hospital is teaching promoters under his supervision to suture deep wounds and the Red Cross

teaches individuals to do intravenous inyections. In fact, many promoters in the area have taken advantage of the Red Cross class and have learned to give intravenous inyections.

i. The current system of record-keeping for the promoters is unnecessarily complex, at the same time the central level does not express interest in the results of the promoter reports.

j. Regional insecurity. There is a conviction that AID has changed its policy about training and that the end of project 219 will mean the end of primary health care training in general.

2. Comparison with Past Operation of the Promoter Program

a. Course duration. In 1979 the promoter course ran for 45 days, but the additional 15 days was not seen as necessarily beneficial to the promoters. In fact, the additional time may have represented a hardship for them because they had to leave their families and agricultural responsibilities.

b. Administrative Support. All through the interview, constant reference was made to the neglect of primary health care programs since 1982.

c. Regional Health Commitee. This entity has not been in operation for a year. There seems to be a general lack of interest in the primary health care program at the regional level.

TABLE 5. DRUGS REQUESTED FOR THE 1983 PROMOTER PROGRAM

1. Dimenhidrinato
2. Homatropina
3. Hioscina x 250 mg.
4. Multivitamínico
5. Gluconato Ferroso 200
6. Gluconato Ferroso c/vitamina C
7. Sulfisoxasol
8. Ergometrina Maleato
9. Penicilina Clemizol
10. Acido Acetil Salicilico 500 mg.
11. Mebendazol
12. Clorofeniramina maleato
13. Ampicilina oral

TABLE 6. DRUGS RECEIVED FOR THE 1983 PROMOTER PROGRAM

1. Aspirina
2. Clorofeniramina Maleato
3. Acromicina (ungto. oft.)
4. Mebendazol
5. Dramamine
6. Ergotrate
7. Penicilina Potasica
8. Sulfato Ferroso
9. Gluconato Ferroso
10. Bromide Propantalina
11. Kaolin Pectate

C. The Promoter as a Community Health Care Provider

The two most significant findings of this case study are:

1. The tremendous effort and self-sacrifice extended by the promoter in his delivery of medical care, provision of drugs, community education, and environmental sanitation.

2. The cooperation and participation of the comité de salud in supplying moral support, building materials, and manpower so that the promoter could better provide for the medical needs of the community.

The promoter selected for the case study resided in the community of Purhuay, district of Carhuaz, located on the slopes of the Cordillera Negra. He is 28 years old and unmarried. The major influence on his formative years was his maternal grandmother who is a traditional birth attendant. During the promoter's childhood, he often accompanied his grandmother on visits to patients' homes. The promoter is quite knowledgeable about traditional medical lore and, although I did not see him prescribing medicinal plants, he does not discourage their use by the people in his community. The major points raised during the conversations that I had with the promoter during the interviews were:

a. Construction of the health post. From the onset of the interviews the promoters mentioned the consistent role of the community in helping him provide health services. Since the initiation of the primary health care program in his community, four years ago when he returned from his training session, the community has provided labor, materials, and support for the promoter. The Health Post was constructed three years ago; in addition to the relatively large supply of drugs kept at the botiquin comunal, the community also helped in the provision of a water supply to the health post. The health post is the only structure in the community that contains a water faucet. Community support for the promoter is also demonstrated by their permitting the promoter exoneration from community labor requirements (minga), in recognition of the free services he provides.

b. Drug supply. In addition to the small supply of drugs obtained from the MOH hospital, the promoter made a trip to Lima in order to buy drugs, presenting himself as an MOH employee. Other sources of drugs used by the promoter were private pharmacies and an Italian religious organization that gave him a small amount of drugs and sold him others. The promoter's drug supply, listed in Table 7, contains drugs obtained from the MOH supply as well as those obtained through his own efforts. The promoter estimates that he has spent $70,000 for drugs between 1980 and 1984, based on his records of personal expenses in obtaining drugs. For example, in 1982 he spent 12,000 soles of his own money to make the trip to Lima to obtain the drugs from the pharmaceutical companies. In 1980 he spent a total of 8,000 soles in transportation to obtain drugs from local pharmacies. For additional information on drug purchases during other years, see the list of prices and the drug sales written by the promoter in his manual (Appendix III.)

c. Fees for services. Although he charges for his services, to the people that can afford it, he does not keep the money. All of the money

obtained through drug sales and services are put into the botiquin comunal in order to buy more drugs.

d. Community education. As shown in Table 8, the promoter has given community lectures on a variety of subjects. Attendance is promoted by the comité de salud who publicize meetings and make sure that people attend.

e. Record-keeping. This has been a problem. Due to lack of report forms, the promoter has kept his own handwritten record of the patients seen since 1982. My own personal observation suggest that the record is incomplete and that not all consultations and treatments are recorded.

f. Promoter compliance with MOH regulations. The promoter was observed giving intramuscular injections. He carefully washed his hands, boiled the instruments, and following standard hygenic procedures. I did not feel that any special precautions were taken due to my presence; all materials were well utilized and manipulation of drugs and instruments was smooth and steady, indicating long practice in their use.

g. Patient referrals. In one of the cases attended by the promoter, the patient was using traditional healing methods that involved medicinal herbs, massage, and a professional "rezador" or prayer-expert, together with the remedies recommended by the promoter. The patient used the services of these formal and informal health care providers and their treatments simultaneously. The promoter did not interfere with the patient's choice of therapy and even supplied the name of a professional "rezador" that he knew to be practicing in a nearby town for the patient to consult if he wished. Patient referrals for higher levels in the public health system have been problematical, primarily due to poor treatment at the Carhuaz Health Center. The promoter said that the people in his community were being given inferior medical care in comparison to city-dwellers who frequent the Health Center. For example, one of the villagers complained that he was not given a blanket by the hospital staff, while other patients (city-dwellers) were being provided with blankets. The promoter feels that the staff at the local hospital are similarly prejudiced against country people.

h. Promoter incentives.

*Medical care - At the time of this case study, the promoter was ill. He had a bad cough, was concerned that he had contracted tuberculosis, and had gone to the hospital at Huaraz seeking medical help. Because of a doctor's strike, the promoter consulted a private physician, who gave him prescriptions and told him to get laboratory work done and a X-ray. The promoter tried to get the necessary drugs at the hospital pharmacy, but his prescription was not completely filled: instead of the dosage of 20 pills recommended by the doctor, the pharmacist only gave him 4. He tried to get an X-ray at the hospital radiographic service, but was told that there was no film available; this meant that he had to spend s10,000 to buy film so that the hospital radiologist would take the X-ray. The promoter spent a total of s53,000 on his onw medical care for one day; laboratory charges and drugs cost an additional s45,000. The promoter was very upset at having to spend this amount of money because he had

been promised free medical care at the hospital. When I inquired about the medical care of promoters, I was told by social workers that there were no "normas" to cover this situation and that the social workers try to do all they can to help the promoters on an ad hoc basis.

*Foregone income - The promoter calculated that he foregoes income as a wage laborer in the amount of 120,000 soles per month.

*Other program's incentive system - The promoter is also involved in distributing food for the PAE-PAMI nutritional supplement program. In return for his services, he receives a ration of food as a token of appreciation for the work that he does for the program. The promoter does not understand why the MOH gives him absolutely nothing for the demanding work that he performs as a health promoter.

i. Promoter's plans for the future - Although the promoter feels a strong sense of responsibility to his community, he cannot continue to provide them with free service. The promoter prepared a list of suggestions that he wanted to be brought before the people at AID who are in charge of training promoters in which he asks for material goods needed to provide the type of care that is necessary for his community. This includes drugs, materials, and a regular salary for himself so that he can lead a normal life while performing his duties as a health promoter.

j. Promoter's pharmaceutical expertise - The promoter made, as a reference for drug use, a list of the equivalencies between commercial drugs and Basic Medicines; he referred to this list when it was necessary for him to select a drug for patient care.

TABLE 7. PROMOTER DRUG SUPPLY, COMMUNITY OF PURHUAY, APRIL 6, 1984

Drug	Quantity	Price +
* Homatropina	10 frascos	
* Hioscina N-butil Bromuro	40 tablets	
* Aspirina	60 tablets	
* Pepsamar	80 tablets	
* Multivitamínico	15	
* Dexametazona	20 tablets	
* Fitiquinona	40 ampules	
* Tiabendazon	10 frascos	
* Bronhidrato de Dextrometorfano	30 frascos	
* Clorofiniramina maleato	3 frascos	
* Lidocaina	4 frascos	
* Ergometrina	5	
* Penicilina	2 ampules	
Andex-250		660
Tylenol	2 boxes	3,000
Vitacose		850
Calcium & Vitamin C		1,200
Teregran		1,300
Antelmina	2 bottles	3,000
Sobrepin Respiro	2 bottles	2,000
Ozopulmin		500
Ferrous Gluconate	400 tablets	2,000
Sistalgin		800
Kenacort		1,500
Sedotropina		1,500
Disinfectants	2 tubes	3,000
Gelusil	1 bottle	940
Ulcelac		
Naligen		
Aneurin Fuerte	2 ampules	3,000
Saren		3,000
Artrcrekora Fuerte		
Lincomicina		1,800
Hepabionta		
Multimicina		1,200
Cloroalergan	520 tablets	

+ Prices on boxes. Other prices not available.
* Drugs given by the MOH.

TABLE 8. TALKS GIVEN TO THE COMMUNITY OF PURHUAY BY THE HEALTH PROMOTER DURING 1980

Date	Subject	Attendance
10-11-80	dental hygiene	50 children and 6 adults
28-11-80	potato cultivation	60 adults
16-08-80	typhoid fever	30 adults 6 teenagers
24-04-80	child vaccination	40 adults 7 teenagers
12-02-80	infant vaccination	30 adults 5 teenagers

TABLE 9. PATIENTS SEEN BY THE PROMOTER FROM THE COMMUNITY OF PURHUAY BETWEEN SEPTEMBER 1983 - APRIL 1984

Patient	Age	Complaint	Treatment
September, 1983			
female	65	herida infectada	curación
male	41	tos, convulsión	jarabe anti-tos
female	45	dermatitis	tinaderm, curación
female	45	dermatitis	benacort
male	7	herida infectada	curación con antibiótico
female	18	tos	bromohidrato dextrometrophane
female	22	bronquitis aguda	terrabron (ampolla)
female	69	dolor de muelas	analgésico
male	51	herida	curación

October, 1983 (no data recorded; the promoter said that he did not keep track of his patients because he ran out of paper.)

November, 1983			
male	23	dolor de cabeza y vómitos	aspirina y estabilin
female	70	reumatismo	ribocort fuerte
female	1	herida	curación
male	1 mo.	anemia	teragran (gotas)
December, 1983			
female	2	diarrea moderada	antidiarréico y sales rehidrantantes
male	3 mo.	herida	curación con antibióticos
female	7	diarrea	antidiarréico y sales rehidratantes
female	38	herida	curación
female	41	bronquitis	sobrepin (amp. e.v.)
female	25	amigdalitis	lincocin (ampolla)
female	19	herida	curación
January, 1984			
male	9	herida	curación
male	35	sarna	escabil
female	34	tos seca	sobrepin (amp. e.v.)
male	36	dolor de muelas	analgésico
male	75	infección del oido	curación
female	16	herida	curación

TABLE 9. PATIENTS SEEN BY THE PROMOTER FROM THE COMMUNITY OF PURHUAY BETWEEN SEPTEMBER 1983 - APRIL 1984 (cont.)

Patient	Age	Complaint	Treatment
February, 1984			
female	5	gripe	mejoralito
female	40	herida	curación
female	20	herida	curación
male	3	herida	curación
female	2	herida	curación
male	10	herida	curación
male	3	herida	curación
female	2	herida	curación
female	1	diarrea	antidiarréico y sales rehidratantes
March, 1984			
female	33	tos seca	dextrometrofino
male	7	tos	dextrometrofino
male	1	diarrea y vómitos	antidiarréico y sales rehidratantes
female	1	diarrea y vómitos	antidiarréico y sales rehidratantes
male	13	herida	curación
male	12	gripe	mejoral
male	56	gripe	mejoral
male	56	alergia cutánea	dexametasoma (ampolla)
April, 1984			
male	41	con receta médica	calciosandoz (amp. e.v.)
male	49	con receta médica	megacilina
male	49	con receta médica	megacilina
male	12	herida	curación

TABLE 10. PATIENT CARE PROVIDED BY THE PROMOTER FROM PURHUAY BETWEEN MARCH 1982 - DECEMBER 1983 (based on data in MOH reporting forms)

Inyections	Treatments	Total Patients Treated	Communal Meetings
March 1982			
10	5	18	-
April 1982			
6	5	13	1
May 1982			
3	4	15	1
June 1982			
8	11	30	-
July 1982			
12	4	13	1
August 1982			
12	5	14	1
September 1982			
5	-	10	1
October 1982			
5		5	1
November 1982			
10	5	13	1
December 1982			
2		13	1

COMMENTS

After observing the practice of three promoters, examining the records of their activities, interviewing community leaders about the provision of medical care by promoters, and interviewing MOH personnel involved in the promoter program since 1979, I am struck by a few features of the program:

1. The apparent inequality in the provision of drugs, and supplies among health regions.

2. The unavailability of economic resources for the functioning of this program, particularly in the provision of monetary incentives for promoters.

3. The assumption, on the part of the MOH, that rural communities can support the costs of maintaining a promoter program.

4. The limitations placed in MOH norms on promoter's medical activities, on the one hand, and the implicit acknowledgment of ther performance of unsanctioned activities, on the other.

5. The assumption, on the part of the MOH, that all rural communities are integrated enough to be able to organize a comité de salud that will provide the promoter with the moral and communal support needed for the performance of curative and preventive activities.