PD-ABA-499

64940

A.I.D. EVALUATION SUMMARY - PART I

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS.
2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit:
Mission or AID/W Office USAID/Perú
(ES# _____)

B. Was Evaluation Scheduled In Current FY Annual Evaluation Plan?
Yes ☐ Slipped ☒ Ad Hoc ☐
Evaluation Plan Submission Date: FY 89 Q 2

C. Evaluation Timing
Interim ☐ Final ☒
Ex Post ☐ Other ☐

D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
527-0311	PRISMA/JHU Identification of High Risk Families for Child Mortality in Perú	6/30/86	10/31/89	980	980

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director

Action(s) Required	Name of Officer Responsible for Action	Date Action to be Completed
Should additional studies be conducted on project data?	Charles Mantione	1/90

(Attach extra sheet if necessary)

APPROVALS

F. Date Of Mission Or AID/W Office Review Of Evaluation: (Month) (Day) (Year)

G. Approvals of Evaluation Summary And Action Decisions:

	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
Name (Typed)	Charles Mantione	Josephine Gilman	Cary Kassebaum	Craig G. Buck
Signature	[signature]	[signature]	[signature]	[signature]
Date	[illegible]			[illegible]

ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

This project developed a "Risk" methodology to allow trained Community Health Workers (CHW) extend Child Survival strategies to the "hardest to reach" segment of Peruvian society by identifying families more likely to have infants die or be malnourished. The project was implemented in a peri-urban area and in a rural highland region of Peru by PRISMA, a Peruvian PVO and the Johns Hopkins University. PRISMA conducted this final evaluation to summarize the findings of the study and recommend future activities. The major findings and conclusions are:

- It was not possible to demonstrate an effect of the Risk Score Methodology on infant mortality or malnutrition when comparing a group of promoters trained in the risk methodology to another control group.

- Health promoters could be trained to target and spend more time on high risk families without negatively affecting low risk families.

- Nutritional status was declining in Project areas and should continue to be monitored.

- A further study of the relationships of maternal height, low birth weight, malnutrition and death should be performed.

- The risk methodology should continue to be used in PL 480 Title II feeding programs and operations research should be conducted at selected food distribution sites to refine and adapt the risk indicators.

- The major causes of death in the peri-urban area are peri-natal causes, accidents, and violence. These current causes of death indicate the success of child survival interventions over the past few years.

- The risk targeting approach should be used by health promoters so as to improve the efficiency of their work.

COSTS

I. Evaluation Costs

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. $)	Source of Funds
Name	Affiliation			
Carlos Valente	PRISMA	in-house evaluation	in-house evaluation	PRISMA Grant 527-0311
Carmen Marin	PRISMA			
Josephine Gilman	PRISMA			
Miguel Campos	Consultant			

2. Mission/Office Professional Staff Person-Days (Estimate) 0

3. Borrower/Grantee Professional Staff Person-Days (Estimate) 155

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A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)
Address the following items:

- Purpose of evaluation and methodology used
- Purpose of activity(ies) evaluated
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office:	Date This Summary Prepared:	Title And Date Of Full Evaluation Report:
USAID/Perú	1/23/90	Evaluation of the PRISMA Project No. 527-0311, Identification of High Risk Families for Child Mortality in Peru

1. PURPOSE

The purpose of this project was to design a "risk score" methodology for identifying individuals or families with a high risk of child mortality or malnutrition and to target scarce health care resources to them. Specifically the project aimed to increase the impact of child survival strategies by training MOH, PVO and community-based health promoters in child survival interventions and in the use of the risk score methodology to target those interventions.

The assumption implicit in developing the risk score was that children who had a higher likelihood of dying or suffering malnutrition could be identified on the basis of family characteristics. These family risk factors could then be used to selectively target supplemental food and child survival interventions to the children and their families so as to prevent the adverse outcomes. It was recognized that the risk factors would have to be sufficiently sensitive and specific so as to achieve the greatest impact with a limited amount of food and health care resources.

2. PURPOSE OF THE EVALUATION AND METHODOLOGY USED

The evaluation of the project consisted of an in-house evaluation of the effectiveness of the risk score methodology, as well as an evaluation of the extent to which project outputs were achieved and recommendations to A.I.D. for use of the materials and risk score methodology developed under the project. Specifically the effectiveness of the risk score was evaluated by comparing the outcome indicators (birth weight, maternal and child mortality and malnutrition) of two sample populations served by two groups of community health workers (CHWs), one of which was randomly assigned to use the risk score approach when providing the child survival services that would normally be provided by the CHWs.

3. FINDINGS AND CONCLUSIONS

In order to identify the familial risk factors that could be used to predict childhood mortality and malnutrition, a case-control study was done of the population living in a Lima pueblo joven. Risk factors were then identified which were present in families who had experienced a childhood death or had a malnourished child but were not present in a comparison group of families, matched for residence and age of children.

The final group of risk factors was reduced by eliminating those factors that were unstable or not subject to modification through any kind of intervention. The final group of risk factors identified were the following:

a. Father's education less than 7 years or mother's education less than 6 years
b. Child younger than 2 years old who was breastfed less than 2 months
c. Total number of live births greater than 2
d. Less than 24 month interval between last two births
e. Mother's height less than or equal to 148 centimeters
f. Severe problem during pregnancy occurring during last 2 years
g. Birth weight of last child less than 2.7 kg

In order to determine the risk factors for a rural population, which could in theory differ substantially from the Lima periurban population from whom the above risk factors were obtained, a similar case control study was done among a sample of rural families in the department of Cajamarca. The risk factors identified were the following:

a. Non-ownership of land
b. Kitchen and bedroom of house located in same room
c. Fever during pregnancy
d. Periodic use of alcohol by father

The evaluation also measured the degree of completion of the specific project outputs. The outputs and their degree of completion were the following:

End of Project Outputs:	Programmed	Achieved
Risk Score:		
Developed	Yes	Yes
Tested	Yes	Yes
Training in Risk Technique to:		
health center professionals	300	335
community health workers	200	369
Development of Risk Manuals and training materials	750 manuals	1,000 manuals (still in print as of 1/90)
Provision of child survival services and education to community residents	50,000	57,000

To compare the effectiveness of the risk score methodology, all CHWs trained by the project at the Lima site were randomly divided into two groups: those who were trained to use the risk score card and selectively target their normal child survival interventions to the families identified as at risk, and a control group who provided child survival interventions in their community indiscriminately. After six months the health status (birth weight, maternal and child mortality and incidence of malnutrition) of the populations served by the two groups of CHWs was measured. The results failed to show any significant differences between the health status of the treatment and control groups. The report speculates that the lack of differences between the two groups could have been due to a) the low frequency of the mortality indicator used; b) the small size of the samples; c) the short intervention period used; and d) project-related benefits that benefitted both treatment and control communities and possibly masked the effects of the risk score application.

4. PRINCIPAL RECOMMENDATIONS

The principal recommendations mentioned in the evaluation report were the following:

a. The risk targeting approach should be used by health promoters so as to improve the efficiency of their work.

b. The impact evaluation that was performed to evaluate this project should be repeated again after one year to confirm recent findings that nutritional status is declining in the project site.

c. A further study of the relationships of maternal height, low birth weight, malnutrition and death should be performed.

d. Adaptations of the risk methodology should continue to be used at the national level for the targeting of PL480 Title II foods in the PANFAR Ministry of Health/PRISMA Program.

e. Operations research should be conducted at selected food distribution sites of the PANFAR Program in order to refine the risk indicators and adapt them for the specific areas.

ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

Evaluation of the PRISMA Project No. 527-0311 Identification of High Risk Families for Child Mortality in Peru.

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

The evaluation report fully explains the lengthy and complex process involved in identifying and testing the risk factors for childhood mortality and malnutrition. It also clearly summarizes the project's outputs and describes in detail the community-based health programs designed by the project for the reduction of malnutrition and mortality in the target communities. Indeed it appears from the report that one of the most successful aspects of this project was the delivery of health services to the target communities and the forming of a legal association of CHWs in one of the communities.

The project did not provide evidence that the risk target model was any more successful at improving mortality and malnutrition indicators than was the indiscriminate provision of child survival interventions to poor communities. However, the project description does not clearly indicate that that was an objective of the project, although PRISMA took it upon themselves to attempt to prove that the risk score model was superior. If such a conclusion was sought, the project should have had a more rigorous research design and less of a service delivery focus.

Although hard research evidence is lacking, it would seem, a priori, that targeting scarce resources to those most at risk is a good idea and consequently the risk model may not warrant further research before being implemented in selected programs such as food supplementation programs. Additional research that would be necessary if the risk model is applied to food programs nationwide is the continued refinement and adaptation of the list of risk factors so that they are accurate for differing regions of the country.

While there are certain interventions where the risk model seems especially appropriate and necessary--food supplementation programs for example--there may be others where the risk model is inappropriate or unfeasible. The provision of immunizations is but one example. Cost benefit studies should be done before deciding upon a risk factor or blanket approach to the delivery of other child survival interventions.

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64941

EVALUATION OF THE PRISMA PROJECT # 527-0311
IDENTIFICATION OF HIGH RISK FAMILIES FOR CHILD MORTALITY IN PERU

A.B. PRISMA

Las Artes #360, San Borja
Lima-Peru
Phone: 756263

Final Evaluation Report - October 31st, 1989

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SUMMARY

The purpose of this project is, to extend the coverage of Child Survival strategies to the "hardest to reach" segment of the population and increase the impact of these strategies through an active participation of family members, neighbors and community groups. A risk score was developed in both a peri-urban slum population and a rural high altitude population, this risk score was used to identify the "at risk" families, so that interventions could be targeted to them. Community health workers (CHW's) were elected by the communities and were trained by professionals hired by the project. Medical professionals in the Ministry of Health were instructed in the use of the risk strategy through both seminars and technical meetings.

The majority of community interventions were educational by nature, although there were a series of activities both organized and run by community leaders and community health workers with project help, such as the construction and implementation of three health posts, a health post based nutritional rehabilitation program, a community laboratory for the detection of Tuberculosis, community based oral rehydration units, a latrine installation program, a garbage collection system and mini-immunization campaigns. All material needs for these programs were obtained from a variety of donor sources, outside the project.

In this final report we will describe in detail the methodologies used by project personnel to accomplish all project goals and objectives. The use of the risk score card by community health workers is evaluated and the final section of the report includes a discussion of lessons learned. One of the most important end products of this project is that it has influenced the development of a risk targeting strategy for an MOH food distribution program. This program in turn has developed at operational level a national awareness, especially in the public sector, that targeting scarce resources to the population most in need of these resources has a greater potential for impact on child survival indicators.

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II. INTRODUCTION

Risk implies that the probability of adverse consequences is increased by the presence of one or more characteristics or factors. Risk is thus a measure of statistical chance, the probability of a future occurrence which is usually undesired.

Particular vulnerability to a disease is due to the possession of certain characteristics - biological, genetic, environmental, demographic, psychosocial, etc. -which interact with one another. These characteristics, whether measured directly or through indicators, are called risk indicators.

A risk indicator or risk marker is an attribute that is associated with an increased probability of occurrence of a disease or other specified outcome. A risk indicator is not necessarily a causal factor.

The fact that certain communities, families or persons possess characteristics which put them at particular risk for a given disease or outcome accounts for the existence of a causal chain or sequence. Some of these characteristics with a typical causal sequence can be described, for example - low birth weight - child hospitalized, separate from mother - normal breast feeding not established - bottle feeding - increased infection risk - malnutrition - death.

Characteristics designated as risk factors do not operate individually; rather, they interact with one another. Some of these characteristics, or combinations of characteristics, may have a greater effect in the future for a given family.

Assigning different values for each of these characteristics, according to the effect observed for each of them, makes it possible to improve the predictive capability, thereby constituting a risk score table in which a family's final score classifies it as being at low or high risk. Thanks to its simplicity, this tool can be used by health services and community personnel for risk classification, health education and health surveillance of the population.

The score developed under this project is being used by health workers in a Lima shanty town. Single indicators which were most predictive of risk of infant or child death or malnutrition were birth weight less than 2.7kgs and mothers height less than 1.48m. Other indicators which were predictive only when combined together were, birth interval less than 24 months, parity 3 or greater than 3, less than 2 months of total breast feeding in any child under 2 years of age, mothers or fathers years of education less than 7 years and a serious illness during the last pregnancy.

In order to evaluate the program, the score was tested by a group of CHW's, who were chosen randomly from the total universe of CHW's trained by the project team. Outcomes in the population attended by the CHW's such as malnutrition, death, breast feeding, immunization status and low birth weight were compared between the two groups of health promoters, those who used the risk score and those who did not. All families had access to health posts and health care interventions through the health posts.

III. BACKGROUND

Peru is typical of many under-developed countries with its high infant and child mortality and morbidity (1). The principal causes of death in these age groups are acute respiratory infections and acute diarrhea which are frequently secondary to vaccine preventable diseases such as measles. Among the most important factors associated with the high morbidity and mortality are malnutrition, incomplete immunizations and low birth weight.

Risk focus is a strategy which was initially used successfully in the obstetric field, factors were identified which could be used as indicators for the selection of high risk pregnancies. A risk score was designed by Fortney, and although it is one of the most well known, the indicators were selected arbitrarily, not by the use of statistical techniques. However, risk scores which were developed using a rigorous statistical technique, were too complicated for every day use (2).

Child survival interventions are designed to diminish infant morbidity and mortality by preventing the principal causes and thus diminishing the effect of the different associated factors. However, child survival interventions are difficult to apply on a large scale in countries where there is public sector inefficiency, scarce resources and where the population most in need of the interventions do not have access to or seek them. The risk focus can therefore be a very valuable tool when applied to child survival interventions aimed at the reduction of infant and child morbidity and mortality.

Many factors which affect child survival have already been identified, biological maternal factors are: age, parity, birth spacing (3, 4, 5). The following environmental factors have been reported: environmental sanitation, food storing and preparation, and infection from animals. Nutritional factors include: deficiencies in calories, proteins and specific nutrients. Other important factors are the use of health services and preventive health care (5).

In Bangladesh the relationship between nutritional deficiency and a higher risk of death has also been reported (6). The relationship between the lack of immunizations, acute respiratory infections infant mortality has also been demonstrated in Bangladesh (7). Some studies have attempted to develop a conceptual framework for the analysis of infant mortality, seeking biological determinants and their relationship with attitudes and practices(8).

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We feel that this project which has developed a risk score according to the relative risk of each one of its factors, and which uses CHW's to target child survival interventions to the groups who most need them is a new and exciting strategy within the child survival field.

Lima Population:

The communities in the Pampas of San Juan were chosen for this study because of the ideal size of the population, their lack of all health services and their proximity to the peri-urban areas of Lima. The Municipality of Lima had planned the "invasion" of this area a few years previously and were still in contact with the population. Maps of the area were obtained through the municipality and community leaders were met and the intended activities were explained to them. Co-ordination meetings were held with the local MOH who were very supportive of our working in this area, they felt that the lack of primary health facilities congested the local hospital out-patients department. Legal agreements were drawn up with the MOH and the local Municipality for our work in this area. This population is situated in a peri-urban pueblo joven (shanty town), the Pampas de San Juan de Miraflores, located in the Cono Sur of Lima. This pueblo joven was established 5 years ago and contains 28 communities and 35,000 inhabitants. In the Pampas de San Juan 22.6% of the total population is under 5 years old and the average age of fertile women is 27.9 years. There are 3 working health posts which function under a three way agreement between the Ministry of Health, the community and PRISMA. Over 200 CHW's were trained by the project, one per block for the total population of 35,000 individuals.

Approximately 70% of the houses are temporary structures made of straw matting and bamboo poles while the remainder are of brick. There is no potable water supply to individual homes and less than one third of homes have latrines. Water is supplied to most of the area by cistern trucks, but four communities also have standpipes which function irregularly. About 65% of the population migrated into Lima from the sierra while 35% were born in Lima.

Cajamarca Population:

The province of Hualgayoc is situated 95kms to the north of Cajamarca, the journey is on unpaved roads, crossing the alti-plano and can take up to 6 hours. The roads are impassable in the rain, and there is approximately 1,000mm of rain per year. To reach the small town of Hualgayoc one descends into a valley situated at about 3,500 meters. The climate is temperate and cold. The mode of transport in this area is by horse or mule, we used a 4 wheel drive landrover for a few months, however, because of the steep narrow paths which wind around the barren, rocky hills the landrover was

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unable to reach most of the communities. We received permission from AID to purchase horses for the field team, this enabled the team to move with more ease between communities. At the close of the project these horses were passed on to the "Rondas Campesinas" in both the districts of Hualgayoc and Chugur (Annex 1).

The Rondas Campesinas are legally constituted groups who conduct a community "watch" for cattle thieves, terrorists, etc. They move through the communities at night on horseback and are armed. There is a police post in the small town of Hualgayoc, the Rondas co-ordinate with this police post, the police do not leave the town. The Rondas also help to mobilize sick people, and in our project worked with both the CHW and the MOH nurse, who both borrow horses when needed to visit isolated communities. Our relationship with this group was vital to the success of our project, as the Rondas in each community gave a guarantee of safe conduct to the field teams.

Hualgayoc and its neighboring district Chugur were chosen for the project because the existing health services were very weak and lacked organized community outreach programs. All work was conducted in close co-ordination with the UDES Cajamarca, where the project had an office which maintained a supply line for the field team and where data was coded and entered into a computerized data base. At the end of the project the computer and printer were donated to the UDES Cajamarca (Annex 1).

IV. ACCOMPLISHMENT OF OBJECTIVES

(i) The determination of characteristics of families with a high risk of infant or early childhood death or malnutrition

Objective:

To determine the characteristics of families and individuals with a high risk of infant or early childhood death or malnutrition.

(a) LIMA PERI-URBAN SITE:

Since October 1986 the project has developed a community based surveillance system for child malnutrition and mortality, which has been used in the design and evaluation of the risk score for use by volunteer primary health care workers. The project site in San Juan de Miraflores has a total population of 35,000 individuals.

An initial community census (Annex 2) for each family, which includes socio-economic data, obstetrical history of the women, child immunization history, birth dates and height and weight on all children 3 years and under was conducted. This information was updated every 2-3 months along with deaths, immigrations, emigrations, new births and other pregnancy outcomes (Annex 3).

There follows a list of the variables collected by the PRISMA Census and Surveillance System in the Pampas de San Juan, all births, deaths, immigrations and emigrations are updated every 10 weeks, all variables updated are marked with an asterix (*):

All family members:

Name *
Relationship to head of Household *
Sex *
Age *
Marital status *
At present resides in household *
Department born in *
Department lived in from 9 years to 15 years of age *
Years in Lima *
Years in the community *
Educational level *

Family members over 12 years of age:

Occupation *
Work description *

Self employed *
Temporary or permanent employment *
Paid helper *
non paid helper *
For sales only, where and what *

Women from 14 to 55 years

Of all live births:-
How many live in this house *
How many live in other places *
How many have died *

For children under 5 years

Date of birth *
Weight *
Height *
Date of above measurements *
Is there a vaccination card *
Number of BCG's *
Number of DPT's *
Number of Polio's *
Measles *
BCG scar *

For all pregnancies in the last 5 years and all new births: *

Month and year last pregnancy ended *
How did the pregnancy end *
(abortion, miscarriage, still birth, live birth, twins)
Where gave birth *
Who attended the labor *
Type of labor *
Male or female child *
Birth weight *
Is the child still alive *
If not: - date of death, cause of death and if breast fed *
Was child breast fed until he died *
If alive, breast feeding status and for how many months *

For all women 14 to 55 years of age who live in this house

Age
Education
Age began to menstruate
Has ever been pregnant

Age at end of first pregnancy
Number of live births male/female
Number of still births
Number of miscarriages and abortions
Number of child deaths male/female
Total number of pregnancies
Are you presently pregnant

If yes :- Did you wish to be pregnant
In what month are you
Have you been to pre-natal clinic
Since what month
How many times have you gone

If no :- Do you wish to be pregnant
Are you using any method to prevent pregnancy
Do you use any natural method

If does not wish to be pregnant and is not using a method ask why is not using any method.

* All new pregnancies are followed by surveillance and outcomes are recorded every 10 weeks.

Family planning information was collected as a base line Nov. 1986 and repeated after 2 years in Nov. 1988.
An economic survey was performed in 1987 and repeated in 1989.

Variables collected for each household

Address
Construction materials for walls, roof and floor
Owners or renters
Property title
Where does household water come from
Where is water stored, is it kept covered
Electricity
Latrine or open field
Hours per day listening to radio
Hours per day TV watched

The data is checked for errors and consistency by a supervisor and then entered into a data base program using DBase IV. Consistency checking and quality control of data which has been entered is performed at regular intervals. All data collection is performed by trained interviewers.

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Four case-control studies were conducted to study the following outcomes:

- deaths within the perinatal period (perinatal)
- deaths between 28 days and 12 months of age (infant)
- deaths between 1 and 3 years of age (child)
- children whose weight for height was less than 80 % of the median (malnourished)

A retrospective evaluation of the census data of the population living in Pampas de San Juan de Miraflores in 1986 was done in order to identify cases which represented the outcomes under study.

Controls were chosen according to the following criteria:

- nearest neighbor that had the same birthdate (+/- 3 months) as their corresponding cases.

- belonging to a family that had never reported a death or a case of malnutrition among its children.

A case history was applied to 40 randomly selected cases in order to establish the facts, circumstances or attitudes which contributed to the outcome of interest occurring among children under 3 years of age in the 12 months prior to December 1986.

A total of 112 risk factors were gleaned from these case histories. In order to study these risk factors, a subsequent questionnaire was devised, composed of 118 questions, covering 452 variables regarding family, living quarters, anthropometrics, background, economic, and demographic characteristics, among other aspects.

Sequence of <u>Analysis</u> (see Table 1)

1) Possible risk indicators were identified by 40 case histories in families where a death had occurred during the last year.

2) A structured questionnaire was applied to both cases and controls to study the possible risk indicators. The questionnaire is presented in Annex 1.

3) Important variables were selected based on odds ratios, p. values and confidence limits using the McNemar's test for paired subjects (included in the True Epistat Program).

In each study group, a selection was made of those variables which fulfilled one or more of the following conditions:

- p. value < 0.05
- odds ratio > = 4
- lower confidence limit >= 1

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As a validation procedure, sensitivity and specificity were determined based on all those individuals for whom information was available regarding their exposure to the chosen variables.
The desired sensitivity and specificity is that value closer to one. The value that was obtained here is quite satisfactory, considering the large number of variables we were working with at the beginning and the inherent complexity of causality in infant death and malnutrition.

The final risk score card was constructed using 7 of the 10 variables, yielding a sensitivity of 65% and a specificity of 71%. The other combinations of variables and point values that were proposed did not yield greater specificity or sensitivity, leading us to establish the risk score card using 7 variables.

The cut-off point was set at 6.5, meaning that a family with 7 points or more is classified as high-risk while one with 6 points or less is rated as low-risk (Table 3)

Two indicators when combined, mother's height and last child breast fed for less than 2 months yielded a sensitivity and specificity of approximately 70 percent. This model was not adopted as the model of choice because of the emphasis which would be put on mothers height as a risk factor and the possible negative impact of this in the field. The instability of the variable child breast fed for less than 2 months "also concerned us as this variable was changing rapidly in the unstable economy". This indicator was also was an extremely rare occurrence in our data base.

FINAL VARIABLES:

Mother's height

Several studies (9, 10) have demonstrated its association with low birthweight, but its association with infant malnutrition and death has not been reported. It can be suggested that its explicative value follows the route of mother's height --> low birthweight --> malnutrition --> child death. This causal chain calls for further study, requiring evidence for its corroboration.

Birth weight

Low birth weight (less than 2500 gr) has accounted for known risk of increased morbidity and mortality in different studies (9, 10). Recently, deficient birth weight, (defined as weight greater than 2500 gr but less than 3000 gr) has been studied in order to identify a group of neonates that represent a high proportion in developing countries and which may account for retarded

intrauterine growth. This group is at greatest risk of developing high perinatal mortality. The combined effect of gestational age and birth weight shows an increased mortality of about two or three times higher.

Birth interval

It has long been recognized, at least in developing countries, that short birth intervals have a negative effect on the well-being of the mother and of the infant displaced by the new pregnancy (11).

It is easy to understand the difficulties of a mother with two (or more) babies close together and to hypothesize the consequences of some of those difficulties (such as increased infant and child mortality), but it is less obvious why infants show an immediate effect of short birth interval as evidenced by higher perinatal mortality, higher fetal wastage and lower birth weight.

In a case-control study of all neonatal deaths in North Carolina, Spiers and Wang (12) found a strong relationship between the length of the inter-pregnancy interval and neonatal death from a variety of causes including sudden infant death syndrome. When they matched for birth weight the relationship disappeared completely, leading the authors to conclude that birth interval influences neonatal mortality through the mechanism of birth weight.

The relationships between birth interval and the outcome of pregnancy is very complex one; there is a net of interrelationships involving the age and parity of the mother, the outcome of the previous pregnancy or pregnancies and probably several social factors such as education.

Parity

Three or more living births was chosen as risk indicator, it is strongly related to pregnancy interval. Janowitz and Nichols in Iran (13) found that among women completing their third pregnancy, those for whom the first outcome only is not surviving have intervals averaging nearly two months less than the index group of women with two surviving children. Those whose second outcome was full term but not surviving (e.g/. stillbirth or deceased) have intervals that are 7 months shorter.

The outcome of the previous pregnancies contributes to the parity level. Other things being equal, women with successful pregnancy outcomes are less likely to achieve the higher parities; they reach the same completed family size with fewer pregnancies than women with any kind of fetal or child loss.

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Parents Education

Various studies have showm the relationship of maternal education and child survival rates (14, 15). Few studies discuss fathers education, but in this society it would be extremely rare for an educated woman to marry a man with significantly less education. This indicator, which is used as an indicator of socio-economic status, is a stable indicator which is easy to identify and in our case-control study appeared to be significant for both mothers, or fathers education.

Child younger than 2 years old who was breast fed for less than 2 months

The impact of breast feeding on child survival has been shown to be strongest during the first few months of life, due to its anti-infective properties and nutrient intake (16). Studies have demonstrated a reduction in enteric disease and a positive effect on nutritional status of breast feeding during the first few months of life (17). Duration of breast feeding has also been associated with a longer birth spacing interval (18). This indicator was a very rare event in our population, although when it did occur was important. The decision was made not to give it the full weight of the odds ratio in the risk score, because of the changing nature of the indicator. The changes in breast feeding practices during the economic crisis have been marked. The use of the indicator will be evaluated, by the analysis of breast feeding data changes and outcomes during the last two years.

Serious illness during pregnancy

This indicator has been included in high risk scores for pregnancy outcomes (19) and has been shown to influence new born survival or birth weight.

This indicator was a composite variable which identified women who had suffered a severe illness during pregnancy, which in turn probably could have some effect on the outcome of the pregnancy. It is an easy indicator to collect, especially at the community level.

(b) Hualgayoc - SIERRA SITE

The study was carried out during 1988 and part of 1989, in all rural communities in the Provinces of Hualgayoc and Chugur in the Cajamarca Sierra. There were a total of 22,000 individuals included in the study.

Because of the lack of roads many of these communities were extremely isolated. Progress was slow due to the need for close co-ordination and frequent meetings with community leaders, who police their own lands on horseback, on more than one occasion field teams experienced delays until local officials could be brought to vouch for them. The project used a local radio station to announce its scheduled visits, and to provide health messages to all of the communities. During the third month of the project we received AID permission to purchase horses for the team, which facilitated the work considerably.

The Cajamarca study was seen as being complementary to the Lima study. The principal objective was to identify indicators which would be found only in a rural high altitude setting, which would not be relevant to a coastal situation.

A total of 25 case histories were performed in families who had experienced infant and child deaths during the last year. This was done in order to complement the list of possible risk factors for the development of the case-control questionnaire. The factors which were identified as differing from the coastal population were related to land ownership/rental, ownership of animals, cooking inside with a wood fire, local midwives deliver most babies and distance from health services. All of these factors were included in the questionnaire.

The field team performed a complete census for all residents present in the community during the visit. Due to terrain difficulties, the visit cycle took more than 5 months to complete, and a similar time frame was imposed in the surveillance visits. The basic information was obtained from the PRISMA census form, described in the previous section and the actual forms can be found in Annex 5. Additional information pertaining to the case-control study was obtained from a separate questionnaire (Annex 6) applied to all residents visited in one of the surveillance visits.

An office was maintained in the UDES Cajamarca and a computer was installed there. All data was entered and checked in Cajamarca and then forwarded with forms to Lima for consistency checking.

Once the data and forms were received in Lima, all children between 0 and 35 months who had died during the 12 months before the visit or who were alive but had weight-for-height deficit below 90% of the NCHS median were selected as cases. This differed from the San Juan Study which had separated all outcomes until the final logistical regression model. As the final required outcome was a sore for death and malnutrition this short cut was taken.

From the census data, as stored in computer, control children were selected by random sampling among those children born within 2.5 months of the index cases, being alive at the time that the case

died and free from weight-for-height deficit at the time of the visit. Their completed forms were selected for data entry. Deaths were prevalent in most families with young children, it was impossible to use the criteria of no death in this population.

There were a total of 75 variables which entered into the analysis against the case and control definition. From the inspection of those, a selection was made of all variables where less than 5% of the 161 children had missing data and where no group level was above 90% of frequency. All cases having any of those variables missing was excluded from subsequent analysis. This left 137 cases.

The statistical package chosen for the logistical regression called GLIM had constraints as to the number of variables which could be run at any one time. Therefore four screening models without interactions have were tried first (i) 10 variables relating to the housing characteristics, (ii) 7 variables relating to the child spacing, (iii) 9 variables relating to the characteristics of the mother and (iv) the other 9 variables. From these four models, only variables with a chi square greater than P = >0.10 were included in the final model this model was then tested for interaction among the variables. A second model was fit with these variables plus parent's age, and mother's anthropometrics in those subjects having these four measurements, without interactions. The final models thus include those remaining terms that have a p-value-to-remove over 0.01 (chi-square testing of the change in deviance).

From the two final models, (Table 4) individual scores were calculated for each subject. In model 1, four discrete variables were used, rounding the logistic regression coefficients to one significant digit. In model 2, three discrete and two continuous variables were used, rounding the logistic regression coefficients to two decimal digits. For the two scores, cumulative frequency distributions were computed, so that sensitivity and specificity curves could be plotted for different cut-off points. Computation of scores was made in SPSS, and the output from the frequency distributions was exported to Lotus, where the cumulative frequencies, sensitivities and specificities were computed.

Model 2 has a more complicated computation. The data from model 2 suggest that mother's height might be a risk factor, but the evidence is not good enough to conclude. So we prefer to use model 1, where, at best cut-off point sensitivity reaches 67-87% (60/76) and specificity reaches 27-50% (29/76) using exact Binomial 95% confidence limits. At the next cut-off point, specificity improves but the sensitivity goes down below 40%, so no satisfactory predictive scale can be found with this score.

The variables found to be most important in a rural sierra setting were, different to those found in a coastal situation. This is probably due to the difference in environment and the absolute lack of medical services. Altitude may play an important role in

survival during the last trimester of pregnancy and the first month of life. In a coastal situation the environment is essentially "friendly" and there is easy access to medical services. In a sierra situation, at least in Hualgayoc child deaths are very common, we were not able to find control families who had experienced no deaths. This was common across all socio-economic levels. Variables therefore, which need to be included in a sierra risk score are the following: Land property, whether tenant or owner, kitchen incorporated in the same room as sleeping, fever during pregnancy and alcohol use of father.

(c) EVALUATION OF THE RISK SCORE

The risk score was evaluated only in the peri-urban community due to both time, cost and logistical considerations. The Cajamarca community study began 15 months later than the San Juan study, the principal objective was to isolate indicators which would be different in a sierra situation, which may not be found on the coast.

All CHW's trained by the project were divided randomly into two groups, those who were trained to use the risk score card (48 CHW's) and the comparison group who continued to use the regular family census forms (47 CHW's).

Continuous measurements of nutritional status of children, mortality, immunization status, breast feeding status, birth weight were collected by the surveillance team, in all families who lived in the block where the CHW's were present. Mortality and nutritional status outcomes were compared for families who had a CHW who used the risk score, and for families who had CHW's who did not use the risk score. As can be seen in Table 5 there were no significant differences between these two groups from January 1st 1989 to June 30th 1989. Additionally other variables which may be related to the principal outcomes were compared, there were no significant differences between the groups. We feel that there were three principal reasons for these negative results, (i) the low mortality rates and the relatively small size of this population for measuring small changes in mortality and (ii) the time frame for the evaluation of the intervention, 6 months, was too brief to measure impact and (iii) as a result of this project health programs in these communities were improved in the whole population resulting in improved health status for all families, it was then difficult to show additional effect due to the intervention.

(ii) <u>The design of a wide range of community based programs to address the specific needs of high risk groups for the reduction of malnutrition and mortality</u>

Objective:

To design and implement a wide range of community-based programs to address the specific needs of these high risk groups for the reduction of malnutrition and mortality.

(a) Construction and implementation of three Health Posts

When we began work in the Pampas of San Juan we began to meet with community representatives in order to discuss their felt needs for health. The most important need expressed by all communities was the lack of local health facilities. The closest MOH facility was a hospital about 2 miles away. Many people expressed concern that even the simplest attention was not available closer to their community. With the local municipality and community leaders 3 sites were chosen for health posts. Only one, in the poorest sector, had to be built from scratch. The other two were built from existing structures, one of which was destined to be a health posts, years earlier and abandoned. The sites were roughly equidistant from each other and in communities which were well motivated to take the responsibility. Building materials, paint, doors, windows, etc., were looked for as donations, local carpenters, builders etc volunteered time for completing the constructions. The municipality dedicated some skilled labor. The three health posts were: 13th of October, Paraiso and Republica Democratica Alemana. We received a donation of equipment from UNICEF and the Pathfinder Fund and the health posts were put into service under a three way agreement between PRISMA, the community and the Ministry of Health. These health posts are now part of the MOH official service list, however, the MOH at various opportunities, has expressed dissatisfaction that the communities own the land and the health posts, the MOH tried to claim the land by attempting to put a wall around one health post, this was rejected by the communities. All moneys which are collected by the health posts for consultations should go towards improvements in the health posts. In recent years the MOH has demanded that this money be returned to the MOH. These issues can be resolved only when the MOH has clear policy statements to this respect. The MOH supplies, Nine auxiliary nurses, a lab technician and a midwife. PRISMA supplies physicians two days per week per health post and the community is responsible for the up-keep of the health post.

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(b) Community based Nutritional Rehabilitation Program

The first project activity was a census of the entire community, then 26 pueblos jovenes, which has grown to 32 since 1986. This census included height and weight of all children under three years. The heights and weights were performed by professionals, who went from door to door, all data was recorded on data collection sheets and additionally a growth chart was left in each home. The census team began to find malnourished children, we felt that it was unethical to measure and leave, so we decided to implement a nutritional rehabilitation program for these children. This was accomplished by an initial screening visit from a doctor to establish diagnosis, and then follow-up visits from a nurse auxiliary team who gave nutritional education plus education on the prevention and early treatment of diarrhea and respiratory infections. As the first year of the project advanced we were able to co-ordinate with ADRA/OFASA with whom we made a convenio for the use of PL480 foods which were also used in the rehabilitation of these children. Through this program we believe that mortality for malnutrition was reduced to a minimum. However, a control group was never implemented because of the ethical implications.

The CHW's continue this program through the health post, however the program still requires a physician input, for the initial screening of the child. Because of the worsening economic situation it is increasingly becoming more difficult to locate these children during the day, as both parents need to work in order to maintain a family, therefore the role of the CHW is even more important than before.

(c) Community Laboratory

During the course of the project we identified tuberculosis as a problem in these communities. It was also identified as a problem by the community leaders. We constructed a laboratory and installed donated equipment in one of the health posts. We trained an MOH lab technician to do basic examinations of sputum for Tuberculosis. We acquired a donation of medicine for treatment and began treatment only when there was sufficient supply of medicine assured to complete that individuals treatment. Medicine for TB has been scarce during the last few years, and although there appears to be more illness the medicine situation has not changed.

A major problem is still the early diagnosis of young children who are too young to provide sputum, because of constant exposure to the illness, these children often give a PPD positive result. The laboratory also does stool exams, hematocrits and white counts.

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(d) Community based Oral Rehydration Units

The health posts are open only 6 days per week, there is no evening or night time attention. CHW's Located in key geographic areas run oral rehydration units from their homes. the equipment for these units has been supplied by MOH and salts are supplied by both MOH and private sources. These women are available 24 hours per day to attend cases of diarrhea. There are 4 UROS in the Pampas.

(e) Latrine installation program

This program was run in co-ordination with UNICEF and the MOH. Families, or occasionally a group of families had to dig a hole for the latrine and place a large, bottomless 50 gallon drum into the hole. This was necessary because of the sandy terrain, side walls of holes collapse easily. One adult male death has occurred, while digging a large hole, without side-wall supports. UNICEF/MOH donated the cement base for the latrine and the families then had t put up side walls and roof.

(f) Improved Garbage Collection System

Garbage is a major problem in the Pampas, vegetable trash is eaten by dogs, metal, glass and paper creates a health hazard. It is generally thrown in open spaces, and creates a health hazard for the children who later sift through it. Human excrement from household "chamber pots" is also thrown in the same places. Burial of trash in such sandy terrain is impractical, burning creates a health hazard for respiratory infections, therefore the most practical solution is carting to dumps. This area is surrounded by communities, there are no convenient open places for dumps, not only that but transportation to a dump them becomes a necessity. Walking 45 minutes or more to dump garbage is not a practical alternative.

The responsibility for garbage collection belongs to the Municipality (San Juan). However trucks were not available for the Pampas. We worked with the Regidor for Health and began to process a justification through the Ministry of the Interior in order to receive a donation of trucks confiscated from narco-traffickers. Four trucks were donated this year, only two however in working condition. One of these has been designated for use by the communities in the Pampas. the CHW's work with neighborhood groups to consolidate the garbage and the truck moves it. This is still insufficient for a total clean up but it has improved the situation.

(g) Mini-Immunization Campaigns

Lima:

These campaign are organized by project personnel and CHW's in each community. The large MOH campaigns were found to be insufficient for the quantity of children in the area, as well as the inconvenience of being for only one or two days. Until 1988 there was no refrigeration in the health posts, electricity to the area is still unreliable. There are vaccines available weekly in the health posts, and these mini-campaigns were considered to be complementary to the health post and CHW's work in the community. These campaigns were usually scheduled for anniversaries, sundays and other convenient days when people were more likely to be home. There were at least 12 mini-campaigns per year held.

Cajamarca:

This was a rational strategy for the rural area, where there are large distances between health facilities and the population they serve. The mini campaigns were implemented by the health center nurse and the CHW's in the communities, especially during local festivals, etc.

(h) Courses for local Midwives and Curanderas

Lima:

The local curanderas/curiosas influence health care actions taken by mothers, because we learned that some of these women in the Pampas were giving antibiotics and anti-diarrheics we decided to try to motivate them to use ORS.

A course for the treatment of acute diarrhea was given to a group of 34 Curanderas from the Pampas. All were women who were identified by the population as traditional healers. The course was given in two groups on separate days, to allow for smaller groups to enable dialogue. The appropriate treatment of diarrhea and the preparation and use of ORS presented. A discussion of the treatment of two "recognized" causes of diarrhea "Mal de Ojo and Susto" was held. The group was given a demonstration, by a well known curandera, of the technique used most frequently to banish both these conditions. This is known as "pasando huevo -passing the egg." The child is cradled in the curanderas' arms in a comfortable position and the egg is slowly and rhythmically passed/rolled over the entire body of the child. This is a soothing procedure for both the child and the observing mother, it takes time and patience. The egg is then broken over a glass of room temperature water,

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according to the appearance of the white and yolk the curandera is able to diagnose the illness and demonstrate to the mother that it has been removed from the child. The final discussion was one of technique for egg passing and all curanderas left with clear instructions for ORS preparation and indications for use, packets of salts and a liter jug.

Cajamarca:

When asking the communities to elect CHW's we noticed that they did not elect women, as did the coastal site, only men were elected. It was felt that men were more useful in this role as they could more easily ride horseback alone to visit other more isolated families in the community. We did observe that all births are attended by women and not men in this area, we therefore decided that a short course of child survival and improved birthing practices would be appropriate for the traditional birth attendants who would be attending the new births. This short course was given to 23 traditional midwives in the provinces of Hualgayoc and Chugur in January and February this year, in co-ordination with the local health center.

(iii) <u>The promotion of the use of child survival strategies and risk score targeting among CHW's and MOH/PVO Health center professionals.</u>

Objective:

To promote the use of Child Survival strategies and risk score targeting among CHW's and MOH/PVO health center professionals.

(a) CHW's Training - Lima

In Lima there were a larger number of CHW's trained than in the rural sierra site. Population density was much greater in the Lima site, the total population in 32 pueblos jovenes was 35,000 compared to 22,000 individuals spread over 2 whole provinces in the sierra of Cajamarca. A total of 298 CHW's were trained in Lima, 98% were female.

The courses received were developed by the project team and validated before use. There were an original 18 modules for trainers and 18 modules for promoters developed. This number was later cut back to 11 modules which were considered the most important for Child Survival. The following modules are included in the manual, immunizations, respiratory infections, diarrhea, malnutrition, growth and development, pregnancy and pre-natal care, labor, delivery and post natal care, tuberculosis, our community, breast-feeding and family planning. There is an instruction module for the trainer as well as the module for the trainee.

Community leaders were contacted and the CHW training program was explained to them, they were asked to choose prospective CHW's using an election process in each block. Although this methodology was slower we found it to be the most successful in terms of long term involvement of CHW's. There were a total of 298 CHW's trained in the Lima site. The training was accomplished using an interactive teaching method and small groups, according to the published manual (Annex 2).

(b) CHW's Training - Cajamarca

Selection of CHW's in Cajamarca was performed democratically by the communities, however the selection bias was towards men. The stated reasons for this was the need for visits to families, in the same community, but at distances of a few kilometers. This meant often travelling at night and on horseback. There were a total of 48 men trained in the communities in the provinces of Hualgayoc and Chugur. The methodology for the training was the same, however the men were grouped and trained in village centers, so as to make the training cost effective. This is different than the urban setting where population density is greater, and the trainers went to each community to give training sessions.

A complementary group of local midwives were trained, as they always dealt with the pregnant woman and the new born. The modules for training were the same as the urban setting.

(c) MOH/PVO Training - Lima

A seminar was held in Lima on 28th and 29th of August in the Sanitas Auditorium. The Lima seminar was attended by 169 professionals, 19% doctors, 46% nurses, social workers and nutritionists and health educators, 35% PVO physicians and nurses. The objectives and seminar program are included in Annex 7.

A second seminar destined for the Lima area was instead reprogrammed to 3 smaller working groups for groups of health center professionals. These were held with the UDES Sur from February to April 1989. A total of 48 professionals were trained in the 3 groups, 35% doctors, 31% nurses and 34% other professionals.

(d) MOH/PVO Training - Cajamarca

A seminar was held in Cajamarca on the 1st and 2nd of December 1988 for 166 participants. Participants came from MOH, Social Security, the Armed Forces, University of Cajamarca and PVO's. Of the total 43% were nurses, 23% technicians and auxiliaries, 12%

nutritionists, educators and midwives and physicians 19%. The seminar objectives and program are included in Annex 8.

(iv) **Health care: A collective community responsibility**

Objective:

To make health a collective community responsibility.

In both per-urban and rural communities all co-ordinations were conducted through official community channels. This often led to longer delays, but in the long run proved to provide a strong base for the programs which were developed.

(a) The Association of CHW's - Pampas of San Juan

In the Pampas there were from 26 to 30 (over 3 years) community leaders with whom we had to co-ordinate, these leaders represented all political parties. As can be imagined getting all these leaders to reach consensus was virtually impossible. The one solution which was seen as a hope for uniting the communities together, was the group of CHW's, who did meet as a group on occasions. We gave legal aid to the group to allow them to form a legal Association of CHW's. This allows them to represent their communities and seek resources from municipalities, etc. Two of these women (CHW's) have been elected as community leaders, this area has had no previous female community leaders.

(b) The CHW's and MOH co-ordination in Cajamarca

The Health Center in Hualgayoc took on the role of co-ordinator of the CHW's. This is important as the health center previously had no outreach program. This allowed them to co-ordinate health activities directly with the communities. A local radio station donated time for "spots" dealing with health issues, and for messages from the promoters and project personnel to the communities.

V. END OF PROJECT STATUS INDICATORS

	PROGRAMMED	ACHIEVED
RISK SCORE:		
Developed	Yes	Yes
Tested	Yes	Yes
TRAINING IN RISK TECHNIQUE TO 300 HEALTH CENTER PROFESSIONALS	300	335
200 CHW'S	200	369
RISK MANUALS + TRAINING MATERIALS	750	750 (in print)
MOH	600	DISTRIBUTION LIST FIGURE 5
PVO	150	
ESTABLISHED CHW NETWORK	200	369
CHILD SURVIVAL SERVICES + EDUCATION	50,000	57,000

VI CONCLUSIONS AND RECOMMENDATIONS

1. It was not possible to demonstrate an effect of the risk score because (a) the effect of the community interventions was greater for the whole community than previously imagined, therefore the risk score did not demonstrate additional effect (b) significant differences in mortality rates between the groups could only be demonstrated with a difference in mortality rates of about 5-7%. This reduction is difficult to achieve when we work with populations whose mortality rates are as low as those measured for this population at the end of the study. (Table 6)

2. We were able to demonstrate, however, that health promoters could target and spend more time with the "at risk" population without any measurable negative effect on the rest of the families that were at low risk. In terms of recommendations for the use of the risk targeting approach for health promoters we can recommend that this approach will be more efficient for the health promoter without sacrificing the quality of care of the remainder of the population.

4. By the end of the project the actual proportion (47%) of families at risk of having an infant or child death or malnutrition was greater than expected (30%). The expected proportion of "at risk" families was measured in 1986 using retrospective data. This change may be due to the unstable economy during the study period which could have increased the number of "at risk" families.

5. Nutritional surveillance in this population will continue due to the recent finding that nutritional status was declining (20). We recommend that the impact evaluation be repeated at the end of 1 year.

6. We recommend that a further study of the relationships of maternal height, low birth weight, malnutrition and death be performed. A retrospective study could be performed using the three years worth of data already collected. Maternal height is an indicator which could have political repercussions if used on a broad scale, it is therefore important that these relationships be defined clearly.

7. The peri-urban population may benefit from specific interventions aimed at other major causes of death, which in this moment are peri-natal deaths, accidents, and violence. These present causes of death give us some indication of the obvious success of the child survival interventions over the last few years.

10. Modelling the available data which has been collected for this population would allow us to measure the impact over time of each of the child survival strategies implemented globally during the last few years.

11. We recommend that adaptations of the risk methodology continue to be used at national level for the targeting of PL480 Title II foods in the PANFAR Ministry of Health/PRISMA Program. Operational research needs to be conducted at selected food distribution sites to refine the risk indicators being used and adapt them for the specific areas.

12. We recommend that the risk methodology be implemented in areas where mortality and malnutrition is high in order as the most effective means to lower these indicators.

VII BIBLIOGRAPHY

1. UNICEF Estado Mundial de la Infancia, 1988.

2. Fortney, J. y Whitehorne E. in Childbirth in Developing Countries. Edited by M. Potts, B. Janowitz, J. Fortney. MTP Press Limited, Boston, 1983.

3. Fortney, J. y Whitehorne E. in Childbirth in Developing Countries. Edited by M. Potts, B. Janowitz, J. Fortney. MTP Press Limited, Boston, 1983.

4. Ware, H. Effects of Maternal Education, Women's Roles and Child Care on Child Mortality. 4. Child Survival Strategies for Research. Population and Development Review. Edited by Mosley W., Chen L. The Population Council, 1984), (Schultz T. Studying the Impact of Household Economic and Community Variables on Child Mortality. 5. Child Survival Strategies for Research. Population and Development Review. Edited by Mosley W., Chen L. The Population Council, 1984.

5. An Analytical Framework for the Study of Child Survival in Developing Countries. In: Child Survival Strategies for Research. Population and Development Review. Edited by Mosley W., Chen L. The Population Council, 1984.

6. Martorell R., Ho T. Malnutrition, Morbidity and Mortality. In: Child Survival Strategies for Research. Population and Development Review. Edited by Mosley W., Chen L. The Population Council, 1984.

7. Foster S. Inmunizable and Respiratory Diseases and Child Mortality. In: Child Survival Strategies for Research. Population and Development Review. Edited by Mosley W., Chen L. The Population Council, 1984.

8. Da Vanzo J. A Household Survey of Child Mortality Determinants in Malaysia. In: Child Survival Strategies for Research. Population and Development Review. Edited by Mosley W., Chen L. The Population Council, 1984.

9. Kramer, M.S. Determinants of low birth weight: methodological assessment and meta-analysis. Bulletin of the World Health Organization, 65(5): 663-737, 1987.

10. Rice Puffer, R., Serrano, C.V. Patterns of Birthweights. Scientific Publication No. 504. Panamerican Health Organization, 1987.

11. Potts, M., Janowitz, B.S., Fortney, J.A. Childbirth in Developing Countries. MTP Press Limited, Boston 1983.

12. Spiers, P.S. and Wang, L. 1976 Short pregnancy interval, low birth weight and the sudden infant death syndrome. Am. J. Epidemiol., 104,15. Edited by Potts, M., Janowitz, B.S., Fortney, J.A. Childbirth in Developing Countries. MTP Press Limited, Boston 1983.

13. Janowitz, B. and Nichols, D.J. Infant and child survival and contraceptive use in the closed pregnancy interval. Edited by Potts, M., Janowitz, B.S., Fortney, J.A. Childbirth in Developing Countries. MTP Press Limited, Boston 1983.

14. Flegg, A. 1982. Inequality of income, illiteracy and medical care as determinants of infant mortality. Population Studies 36, No. 3:441-458. Edited by Mosley, W.H. and Chen, L.C. Child Survival - Strategies for Research. The Population Council, 1984.

15. Ware, H. Effects of maternal education, women's roles and child care on child mortality. Edited by Mosley, W.H. and Chen, L.C. Child survival - Strategies for Research. The Population Council 1984.

16. Butz, W.P. and DaVanzo, J. 1978. Contracepting breastfeeding and birthspacing in Malaysia: A model of decision making subject to economic and biological constraints, Rand Reports (unpublished). Edited by Mosley, W.H. and Chen, L.C. Child Survival - Strategies for Research. The Population Council, 1984.

17. Crescencio, E. et al., Morbidity and nutritional status of breastfed and bottlefed Filipino infants. Research notes No. 15. January 1987. Edited by Gilman, J.B., et al. Ninos Magazine, August 1988.

18. Jain, A., et al., Breastfeeding: patterns, correlates and fertility effects. Stud. Fam. Plan. 12(3): 79-99. Edited by Gilman, J.B., et al. Ninos Magazine, August 1988.

19. Fortney, J.A. and Whitehorne, E.W. The development of an index of high-risk pregnancy. Edited by Potts, M., Janowitz, B.S. and Fortney, J.A. Childbirth in developing countries. MTP Press limited, 1983.

20. A.B. PRISMA/UPCH Working Group, The Probable Effects of the Present Economic Crisis on the Status of Young Children in a Peri-Urban Population. Report Presented to UNICEF, September 1989.

OTHER IMPORTANT ARTICLES USED DURING THE STUDY

1. Taylor, S.M. Frank, J. White, N.F and Myers, J. Modelling the Incidence of Childhood Diarrhea. Soc. Sci. Med. Vol 23. No. 10 pp 995-1002, 1986.

2. Ryder, R.W., Reeves, W.C. and Sack, R.B. Risk Factors for fatal childhood diarrhea: a case-control study from two remote panamanian islands. American Journal of Epidemiology 1985; 121:605-10.

3. Miettinen, O. S. Proportion of disease caused or prevented by a given exposure, trait or intervention. American Journal of Epidemiology 99:325-332, 1974.

4. Miettinen, O. S. Components of the Crude Risk Ratio. American Journal of Epidemiology 96:168-172, 1972.

5. Peters, T.J. et al., Plus ca change: predictors of birthweight in two national studies. British Journal of Obstetrics and Bynaecology, November 1983, Vol 90, pp. 1040-1045.

VII TABLES

TABLE 1

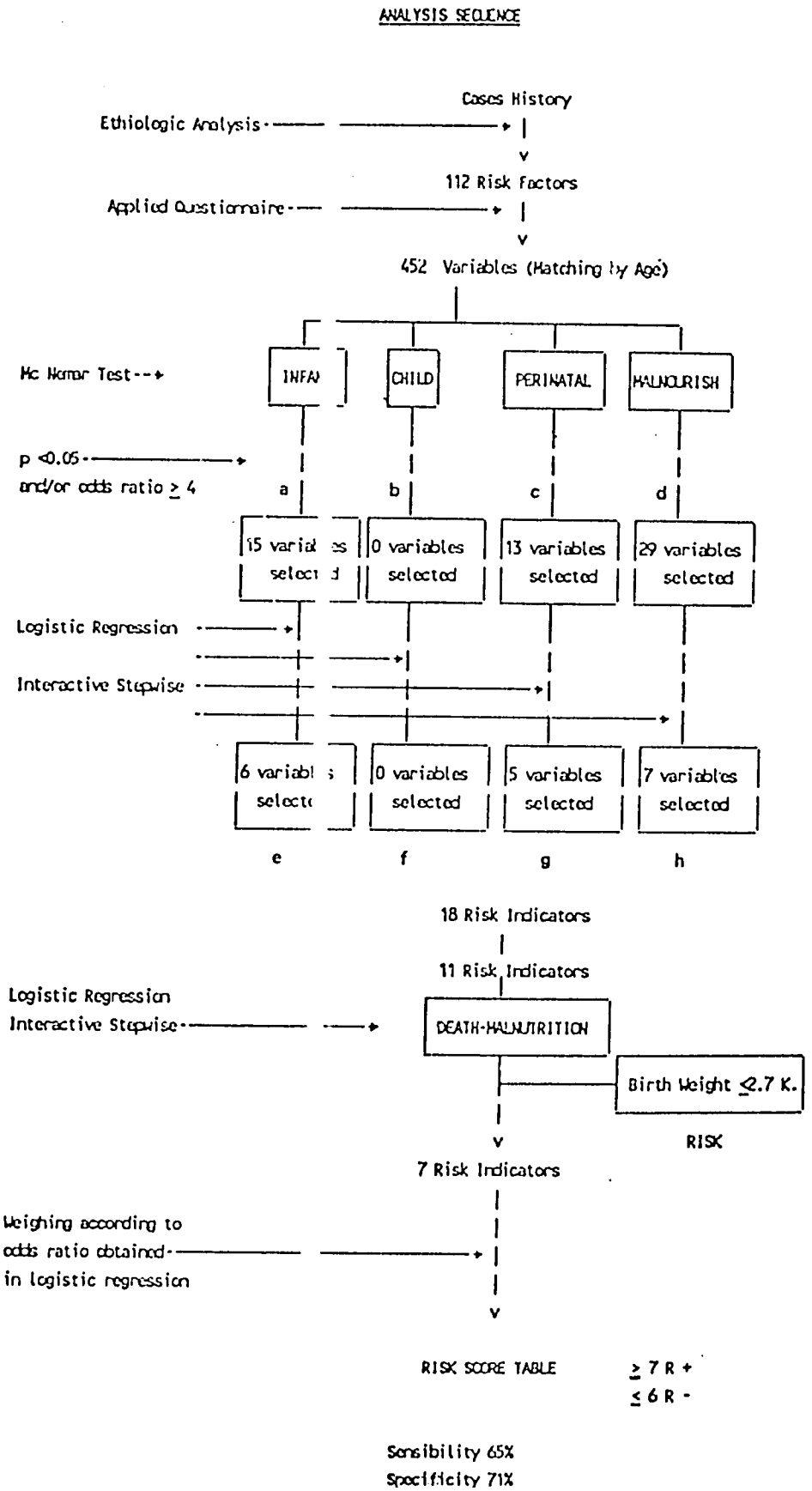
ANALYSIS SECUENCE
Cases History
Ethiologic Analysis
112 Risk Factors
Applied Questionnaire
452 Variables (Matching by Age)
Mc Nemar Test
INFAN
CHILD
PERINATAL
MALNOURISH
p <0.05
and/or odds ratio ≥ 4
a
b
c
d
15 variables selected
0 variables selected
13 variables selected
29 variables selected
Logistic Regression
Interactive Stepwise
6 variables selected
0 variables selected
5 variables selected
7 variables selected
e
f
g
h
18 Risk Indicators
11 Risk Indicators
Logistic Regression
Interactive Stepwise
DEATH-MALNUTRITION
Birth Weight ≤2.7 K.
RISK
7 Risk Indicators
Weighing according to
odds ratio obtained
in logistic regression
RISK SCORE TABLE
≥ 7 R +
≤ 6 R -
Sensibility 65%
Specificity 71%

TABLE 2

FINAL MODEL

OBTAINED IN INTERACTIVE STEPWISE LOGISTIC REGRESSION

	Odds Ratio	P Value
Father's education ≤ 6 years or mother's education ≤ 5 years	1.84	0.19
Child younger that 2 yrs old, who was breastfed less than ≤ two month period	7.46	0.001
Total number of ≥ 3 live births	0.94	0.89
Intergenesic period ≤ 24 months	1.49	0.33
Maternal height ≤ 1.48 cms.	3.37	0.005
Child younger that 2 yrs old within the family, with severe problem during this pregnancy	2.31	0.11
Birth weight ≤ 2.7 kgs.	5.16	0.0055
No Social Security Card	1.56	0.31
Abuse at home	3.24	0.01
Mother works and supports family	1.18	0.68

TABLE 3

FICHA FAMILIAR

A. H.: ..... Promotora: .....
Familia: ..... Mza:..... Lote: .....Fecha: .....

	Nombre	Edad	Grado de Instrucción				Talla
			Ninguno	Primaria	Secundaria	Superior	
Padre							
Madre							

Si alguno de los padres no ha estudiado o ha estudiado Primaria poner un 2.
Si los dos han estudiado Secundaria o superior poner un 0.

A

Si la talla de la madre es menor o igual a 1 metro con 48 centímetros poner un 7.
Si es más alta poner un 0.

B

¿Cuántos hijos vivos tiene actualmente?	+
¿Cuántos hijos que nacieron vivos han muerto?	
Total	

Si el Total es 3 ó más, poner un 2.
Si es menos, poner un 0.

C

TABLE 4

FINAL LOGISTIC REGRESSION MODEL 1

	Estimated log odds ratio	Score
Land property tenant	- 1.006	1
Kitchen and bedroom in the same room	- 0.86	1
Fever during pregnancy	0.87	1
Father sometimes uses alcohol	1.[illegible]	1

3 points or more implies family at risk

FINAL LOGISTIC REGRESSION MODEL 2

	Estimated log odds ratio
Mother's weight	- 0.07
Father's age	0.01
Land property tenant	- 0.65
Fever during pregnancy	0.92
Father sometimes uses alcohol	1.41

3 points or more implies family at risk

TABLE 5

COMPARISON OF MORTALITY AND OTHERS CHILD SURVIVAL INDICATORS

	Intervention Group 1(660)		Comparison Group 2(602)	
Birth Weight	T(179)		(192)	
< 2700	13	(7.26)	15	(7.81)
Mean	3.366		3.35	
Complete immunizations 11-15 m	11	(22.45)	9	(15.79)
	49		57	
Maternal Mortality	1		--	
< 36 months mortality	1		--	
Points ≥ 7	305	(46.21)	283	(47.01)

	Proportion of episodes		Prevalence of episode of a acute malnutrition	
p/t < 90	67	(533)	80	(504)
%	12.57		15.87	
Mean	104.59		102.89	P/T

TABLE 6

INFANT MORTALITY RATE (a)

		NUMBER OF DEATHS CHILDREN UNDER 12 MONTHS	INFANT MORTALITY RATE (by 1000 live births)
1987			
	January - March	2	
	April - June	8	
	July - September	3	
	October - December	6	
	TOTAL	19	25.1
1988			
	January - March	5	
	April - June	10	
	July - September	7	
	October - December	6	
	TOTAL	28	30.3

(a) Infant Mortality Rate = $\frac{\text{Number of deaths under 1 year age.}}{\text{1000 Live births during the period.}}$

PERINATAL MORTALITY RATE (b)

		NUMBER OF DEATHS	PERINATAL MORTALITY RATE
1987			
	January - March	2	
	April - June	5	
	July - September	3	
	October - December	2	
	TOTAL	12	15.9
1988			
	January - March	8	
	April - June	10	
	July - September	5	
	October - December	4	
	TOTAL	27	29.2

1b) Perinatal Mortality rate = $\frac{\text{Number of stillbirths + Number of deaths under 7 days age.}}{\text{By 1000 live births + number of stillbirths.}}$

VIII ANNEXES TO FINAL REPORT

PROJECT No. 527-0311

ASOCIACION BENEFICA PRISMA
OCTOBER 31, 1989

ANNEX 1

DONATION OF EQUIPMENT AND HORSES AT PROJECT TERMINATION

PRISMA

Proyectos en
Informática
Salud
Medicina y
Agricultura.

Lima, 28 de Abril de 1989
PR-213.89

Señor Presidente
Rondas Campesinas del Distrito de Hualgayoc
Cajamarca.-

De nuestra consideración:

Nos es grato dirigirles la presente a fin de hacerles llegar en calidad de donación los enseres que detallamos a continuación:

- 1 Mesa y 2 bancas Grandes
- 2 camas con respectivos colchones
- 2 linternas
- 2 caballos con respectivos aperos y una Montura
- 1 Linterna Grande

Esperamos que esta donación de enseres arriba mencionados, les sean de utilidad y contribuyan a mejorar los servicios que Uds. prestan a la comunidad.

Sin otro particular, y deseándoles el mejor de los éxitos en sus actividades futuras, nos despedimos reiterándoles los sentimientos de nuestra más alta estima.

Atentamente,

Proyectos Informática Salud Medicina Agricultura
A.B. PRISMA

Josephine B. Gilman, MPH
Directora

José Flores Prialé
Director Administrativo

PRISMA

Proyectos en
Informática
Salud
Medicina y
Agricultura.

Lima, 28 de Abril de 1989
PR-214.89

Señor Presidente
Rondas Campesinas del Distrito de Chugur
Cajamarca.-

De nuestra consideración:

Nos es grato dirigirles la presente, a fin de hacerles llegar en calidad de donación los enseres que detallamos a continuación:

- 2 camas con respectivo colchón
- 1 lámpara Petromax
- 1 caballo con respectivos aperos
- 4 sillas de madera.

Esperamos que esta donación de enseres arriba mencionados, les sean de utilidad y contribuyan a mejorar los servicios que Uds. prestan a la comunidad.

Sin otro particular, y deseándoles el mejor de los éxitos en sus actividades futuras, nos despedimos reiterándoles los sentimientos de nuestra más alta estima.

Atentamente,

Proyectos Informática Salud Medicina Agricultura
A.B. PRISMA

Josephine B. Gilman, MPH
Directora

José Flores Prialé
Director Administrativo

PRISMA

Proyectos en
Informática
Salud
Medicina y
Agricultura.

Lima, 28 de Abril de 1989
PR-216.89

Señores
Centro de Salud de Hualgayoc
Cajamarca.-

De nuestra consideración:

Nos es grato dirigirles la presente, a fin de hacerles llegar en calidad de donación, lo que detallamos a continuación:

- 1 balanza Reloj
- 1 tensiómetro
- 1 Mesa blanca
- 1 bolsa de dormir

Esperamos que la donación arriba mencionada, les sea de utilidad y contribuya a mejorar los servicios que Uds. prestan a la comunidad.

Sin otro particular, y deseándoles el mejor de los éxitos en sus actividades futuras, nos despedimos reiterándoles los sentimientos de nuestra más alta estima.

Atentamente,

Proyectos Informática Salud Medicina y Agricultura
A.B. PRISMA

Josephine B. Gilman, MPH
Directora

José Flores Prialé
Director Administrativo

PRISMA

Proyectos en
Informática
Salud
Medicina y
Agricultura.

Lima, 28 de Abril de 1989
PR-217.89

Señor Director
Unidad Departamental de Salud
Cajamarca.-

De nuestra consideración:

Nos es grato dirigirles la presente, a fin de hacerles llegar en calidad de donación, los enseres que detallamos a continuación:

- 1 computadora marca HALXT 640 K RAM (8088)
- 1 disk drive 360 procesador 8088.2 8 MHZ
- 1 teclado manual (Fact. 3287 UNIMICROS S.A.)
- 2 escritorios
- 1 armario
- 1 silla
- 1 confortable
- 2 sillones
- 1 sillón tipo Presidente

Esperamos que esta donación de enseres arriba mencionados, les sean de utilidad y contribuyan a mejorar los importantes servicios que Uds. prestan a la comunidad.

Sin otro particular, y deseándoles el mejor de los éxitos en sus actividades futuras, nos despedimos reiterándoles los sentimientos de nuestra más alta estima.

Atentamente,

Proyectos Informática Salud Medicina Agricultura
A.R. PRISMA

Josephine B. Gilman, MPH
Directora

José Flores Prialé
Director Administrativo

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PRISMA

Proyectos en
Informática
Salud
Medicina y
Agricultura.

Cajamarca, 28 de abril de 1989.

Señor Director.

JULIO BARDALES ESPAREA.

Unidad Departamental de Salud - Cajamarca.

REF: Carta PR-217.89. 26 de abril de 1989.

De nuestra consideración:

La presente, tiene por objeto, detallar las características y los montos, de la donación -según nuestros libros- que la A.B. PRISMA hace a su representada, de acuerdo a lo encontrado en la oficina que ocupara dentro de la UDES, el Proyecto RIESGO, de nuestra Asociación.

- Un (01) Computador nuevo marca HALL XT - 640 K RAM (80-8)
  ASI - 103T - serial Nº 7605155 24 MFG.
  Date - 25/JUN/87 - Made in Taiwan R.O.C
  Potencial de 650 K.
  Más Monitor: Modelo P.C. 1261M serie 021356.
  Teclado: Modelo BTC-5060-S/N:70421762.
  VALOR: S/ 2,500.

Unidad Departamental de Salud
CAJAMARCA
OF. TRAMITE DOCUMENTARIO
02 MAYO 1989
CONTROL RECEPCION
Fojas ..... Firma .....

- Dos (02) Escritorios nuevos de metal color plomo de 70 x 120 cm. de cuatro cajones. Valor: I/.6,000.00 c/u = 12,000.00 Intis

- Un (01) Armario nuevo de color plomo de cinco pisos y cajuelas de seguridad con llave. Valor: I/.7,800.00

PRISMA

Proyectos en
Informática
Salud
Medicina y
Agricultura.

- Un (01) Confortable de color plomo y con tres (03) cojines de color negro de espuma y plástico. Valor: I/.6,500.00 Intis

- Una (01) Silla de metal de color marrón.
  Valor: I/.2,200.00 Intis

- Una (01) Silla de metal color negro.
  Valor: I/.1,900.00 Intis

- Una (01) mesa de madera de color caoba de 90 x 120 cm.
  Valor: I/.2,000.00

- Dos (02) Sillones de metal de color plomo de 02 cojines c/u.
  Valor: I/.4,000.00 Intis c/u = 8,000.00 Intis

- Una (01) mesa de madera de color caoba de 60 x 80 cm.
  Valor: I/.1,0 0.00

- Treinta (30) mts. aproximádamente, de contrucción de material noble, techos de calaminas de cemento, tres ventanas de metal y una puerta de madera con chapa.
  Valor: I/. 80,000.00 Intis

Agradeciendo anticipadamente por su gentil colaboración, agradecemos expedirnos el documento de aceptación de la donación.

Reiterámosle los sentimientos de nuestra especial consideración

Atentamente.

YLLANA LEWS

MARCOS REYES CH.

COMISION COORDINADORA A.B. PRISMA.

ANNEX 2

SAN JUAN CENSUS FORM

Comunidad _____ PRISMA Empadronador(a)_____

Mz.____ Lote_____ Fecha ___ ___ 198__

Cod. de Familia _____ CENSO DE HOGARES Dia Mes Año

Podría darme su nombre, el de su esposo, de sus hijos de mayor a menor, y de todas las otras personas que viven normalmente con Ud.?

		Pers. Ø1	Pers Ø2	Pers. Ø3	Pers. Ø4	Pers. Ø5
1.	Nombre	.....	.....	.....	.....	.....
2.	Apellidos	.....	.....	.....	.....	.....
		.....	.....	.....	.....	.....
3.	Parentesco	_____	_____	_____	_____	_____
4.	Sexo	H M	H M	H M	H M	H M
5.	Cuántos años ha cumplido?	_____	_____	_____	_____	_____
6.	Es soltero, casado, conviviente, viudo, separado o divorciado?	.....	.....	.....	.....	.....
7.	Vive en esta casa?	sí no	sí no	sí no	sí no	sí no
8.	Departamento donde nació?	.....	.....	.....	.....	.....
9.	Dpto. donde vivió desde los 9 hasta los 15 años.	.....	.....	.....	.....	.....
10.	Cuántos años está en Lima?	años: .... meses:....	años:.... meses:....	años:.... meses:....	años:.... meses:....	años:.... meses:....
11.	Cuántos años está en (Comunidad)?	años:..... meses:....	años:..... meses:....	años:.... meses:....	años:.... meses:....	años:..... meses:....
12.	Hasta qué año estudió?	_____	_____	_____	_____	_____
13.	No. de madre	.....	.....	.....	.....	.....
14.	No. de padre	.....	.....	.....	.....	.....
*	(SOLO PARA PERSONAS DE 12 AÑOS Y MAS)*					
20.	En qué trabaja?	_____	_____	_____	_____	_____
	Qué hace?	_____	_____	_____	_____	_____
21.	Es por su cuenta?	sí no	sí no	sí no	sí no	sí no
22.	Estable o eventual?	_____	_____	_____	_____	_____
23.	Alguien le ayuda?	sí no	sí no	sí no	sí no	sí no
24.	Le(s) da algún pago?	sí no	sí no	sí no	sí no	sí no
25.	(SOLO PARA VENTA) Dónde (en qué) vende?	_____	_____	_____	_____	_____
*	(SOLO PARA MUJERES DE 14 A 55 AÑOS)*					
30.	De sus hijos nacidos vivos					
31.	Cuántos viven en esta casa?	H___ M___	H___ M___	H___ M___	H___ M___	H___ M___
32.	Cuántos viven en otro lugar?	H___ M___	H___ M___	H___ M___	H___ M___	H___ M___
33.	Cuántos han muerto?	H___ M___	H___ M___	H___ M___	H___ M___	H___ M___
*	(PARA NIÑOS MENORES DE 5 AÑOS DE EDAD)*					
40.	Fecha nacimiento.	___/___/___	___/___/___	___/___/___	___/___/___	___/___/___
41.	Peso Kg.	___,___	___,___	___,___	___,___	___,___
42.	Talla cm.	___,___	___,___	___,___	___,___	___,___
43.	Día/Mes/Año	___/___/___	___/___/___	___/___/___	___/___/___	___/___/___
44.	Tarjeta Vacuna	sí no	sí no	sí no	sí no	sí no
45.	TBC (número)	___	___	___	___	___
46.	DPT (número)	___	___	___	___	___
47.	Polio (número)	___	___	___	___	___
48.	Sarampión	___	___	___	___	___
49.	Cicatriz	sí no	sí no	sí no	sí no	sí no

SOLO PARA MUJERES DE 14 A 55 AÑOS DE EDAD QUE VIVEN EN ESTA CASA

PRISMA

Comunidad _____ Empadronador(a) _____
Manzana _____Lote___ Fecha ___ ___ 198__
Cód. de Fam. _____ Día Mes Año

Persona número _____ Nombre _____ Apellido _____
Edad (años) _____ Nivel de Instrucción _____

60. A qué edad empezó a menstruar? ____ años
61. Ha estado embarazada alguna vez? sí no > PASE A 68
62. Qué edad tenía Ud. al terminar su primer embarazo? ____ años
63. Cuántos de sus hijos han nacido vivos? ____
64. Cuántos nacieron muertos? ____
65. Cuántas pérdidas o abortos ha tenido? ____
66. Cuántos de sus hijos han fallecido? ____
67. Cuántas veces en total ha salido embarazada? ____
68. Está Ud. embarazada? sí no no sabe

Ud. quería salir embarazada?
sí no
En qué mes de embarazo está?
___ mes
Fue a consultar a alguien para controlar su embarazo?
sí no :PASE A 80
Desde qué mes?
___ mes
Cuántas veces ha ido?
___ No. PASE A 80

Hace cuántas semanas fue su última regla?
___

69. Desea salir embarazada? sí no
70. Está haciendo algo para no salir embarazada? sí (especifique) _____
no
71. Usa Ud... ritmo / retiro >PASE A 80
no
72. (SI NO ESTA USANDO NINGUN METODO)
Por qué no está usando un método actualmente? _____

SI NUNCA HA ESTADO EMBARAZADA, FIN DE LA ENTREVISTA.

30. Quisiera preguntarle sobre todos sus embarazos en los últimos 5 años (EXCEPTO EMBARAZO ACTUAL).

		Último Embar	Penúl Embár	Anter Embar	Embar Anter	Embar Anter	Embar Anter	Embar Anter
31. En qué mes y año terminó su ...		mes / año	mes / año	mes / año	mes / año	mes / año	mes / año	mes / año
		(SI ESTA FECHA ES ANTES DE 1982, FIN DE ENTREVISTA)						
32. Cómo se terminó?	Aborto o Pérdida..	>	>	>	>	>	>	
	Nacido Muerto...	>	>	>	>	>	>	
	Nacido Vivo...							
	Mellizos/ Gemelos.							

(EN CASO DE MELLIZOS O GEMELOS NACIDOS VIVOS, USE UNA COLUMNA PARA CADA HIJO)

33. Dónde dió a luz?								
34. Quién la atendió?								
35. Cómo fue su parto?								
36. Fue hombre o mujer?		H M	H M	H M	H M	H M	H M	H M
37. Cuánto pesó al nacer?		kg	kg	kg	kg	kg	kg	kg
38. Está vivo?		sí no	sí no	sí no	sí no	sí no	sí no	sí no
		(SI - PASE A 91 NO - CONTINUE)						
39. En qué mes y año murió?		mes / año	mes / año	mes / año	mes / año	mes / año	mes / año	mes / año
90. De qué murió? (especifique)								
91. Le dió pecho?		sí no >	sí no >	sí no >	sí no >	sí no >	sí no >	sí no >
		(MUERTOS PASE 93)						
92. Todavía le está dando pecho?		no sí >	no sí >	no sí >	no sí >	no sí >	no sí >	no sí >
93. Por cuántos meses le dió pecho? (MARQUE 97 SI LE DIO PECHO HASTA QUE SE MURIO)		meses	meses	meses	meses	meses	meses	meses

50. Aparte de algunos malestares como resfríos por ejemplo, Ud. tiene (o ha tenido en los últimos tres meses) algún problema de salud?

No Sí > especifique _____

51. Tiene (o ha tenido en los últimos 3 meses) su esposo o uno de sus hijos (u otras personas que viven con Ud.) alguna enfermedad?

No	Sí Nombre	Problema	Desde cuándo? (días) 0-7	8-30	31+	Alguien le atendió? Hosp/ Clin.	Posta	Med. Part.	Farm	Otro (Especif)	No

52. Su familia está recibiendo ayuda en alimentos?

_____

_____

53. Tiene Ud. algún comentario o sugerencia sobre los problemas de salud en la comunidad?

_____

_____

Comunidad _____ Empadronador(a) _____
Manzana _____Lote___ Fecha ___ ___ 198__
Código Familia _____ Día Mes Año

DETALLES DE VIVIENDA

100. Material de Construcción

	Paredes	Techo	Piso
Estera/Madera	---	---	---
Adobe/ladrillo/cemento	---	---	---
Eternit	///////	---	///////
Cartón	---	---	///////
Combinado	---	---	---
Tierra	///////	///////	---
Loseta	///////	///////	---
Concreto	///////	///////	---
Otro (Especifique)	_____	_____	_____

01. Ustedes son...? ___ propietario ___inquilino ___ alojado
___ otro (especif)_____

102. De dónde trae su agua? Conección Domiciliaria ------- Pilón ----- Camión ----- Otro ----

103. En qué se guarda su agua? Tanque ----- Cilindro ----- Baldes ----

104. Está tapado? Sí No

105. Tiene luz eléctrica? Sí No

106. Tiene baño? Inodoro ---- Silo/letrina uso privado ---- uso compartido ----- Campo Abierto ---

(SOLO PARA PADRES DE FAMILIA)

107. Cuántas horas al día escucha Ud. radio? _____

108. Cuántas horas al día ve Ud. televisión? _____

120. Cuál es la mejor hora y día para vistarle?

HORA	DIA						
_____	L	M	M	J	V	S	D
_____	L	M	M	J	V	S	D

VISITAS			CITAS		
ENTREVISTADOR(A)	FECHA	HORA	No. PERSONA	FECHA	HORA

Observaciones

ANNEX 3

SAN JUAN SURVEILLANCE FORM

PRISMA

HOJA DE VIGILANCIA FAMILIAR

Comunidad _____

Manzana _____, Lote _____ Código de Fam. _____
CENSO

FECHA (DIA/MES/AÑO) ___/___/___/	___/___/___/						
PERSONAS RESIDENTES	PARA NIÑOS MENORES DE 5 AÑOS			3 AÑOS			
NOMBRE	Cambio	Vacunacion	Cicatriz	Peso	Talla	Fecha	Lac
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
Entrevistador (a)							

Códigos para : a) Cambios

N : Ningún cambio

I : Inmigrante desde la última vuelta

E : Emigrante desde la última vuelta

F / Fallecimiento

P / Parto/Pérdida/Aborto

M : Embarazo (marque M para cada vuelta a la cual la mujer dice que está embarzada no solamente a la primera)

R : Recién nacido

C : Estado civil

b) Vacunación

B _____ : BCG (número)

D _____ : DPT (TRIPLE)(Número)

S: Antisarampión

P: Antipolio (número)

c) Lactancia Materna

C: Completa

M: Mixta

N: No le da pecho

I

Informe sobre Persona Inmigrante

Comunidad _____ Fecha del Informe
Manzana _____ Lote ___ Codigo de Fam.___ __/__/__
Entrevistador (a)
_____

(En caso de una familia inmigrante, use el cuestionario censal)

Sección 1. Informacion sobre la inmigracion

1. Fecha ___/___/___ 2. Razon_____
No se sabe ____

3. Procedencia___ Otra casa de la comunidad ___ Otra comunidad de San Jua
___ Otra zona de Lima Metrop. ___ Otro dpto. _____
___ Otro pais Dirección _____

Sección 2. Información sobre la persona inmigrante

20. Nombre _____ Apellido _____
(anote en hoja de control, y especifique No.___)

21. Parentesco _____ 22. Estado Civil _____
23. Sexo: H M 24. Cuantos años ha cumplido _____
25. Donde nacio _____ 26. Donde vivio desde los 9 hasta los 15 años _____
27. Cuántos años está en Lima _____
28. Hasta que año estudio _____
* (Para personas de 12 años y más)
29. En que trabaja, que hace? _____ Es Estable?___
30. En qué trabajaba antes de venir aquí? _____ Era estable?___
* (Para mujeres de 14 a 55 años siga con historia Obstétrica)
31. De sus hijos nacidos vivos, cuantos:
viven actualmente en esta casa H___M___ En otro lugar H___M___
Han muerto H M
* (Para niños menores de 5 años)
40. Tiene tarjeta de vacunacion? Si No
41. Vacunas recibidas (numero)
DPT (Triple) ___ Polio ___ BCG ___ Sarampión ___
42. Cicatriz de BCG . Si _____ No _____
* (Para niños menores de 3 años solamente)
43. Peso _____ Kg.
44. Talla _____ Cms.
45. Recibe todavia lactancia materna?

___ Si, completa ___ Si, mixta ___ No

Informe sobre Persona Emigrante

Comunidad _____
Manzana _____ Lote ___ Codigo de Fam. ___

Fecha del Informe
___/___/___
Entrevistador (a)
_____

Seccion 1. Informacion sobre la emigracion

1. Fecha ___/___/___

2. Razon _____
No se sabe ____

3. Destino ___ Otra casa de la comunidad ___ Otra comunidad de San Juan
___ Otra zona de Lima Metrop. ___ Otro dpto. _____
___ Otro pais Direccion _____

Seccion 2. Informacion sobre la persona emigrante

20. Nombre _____ Apellidos _____ No. ____
21. Tenia alguna enfermedad o problema de salud antes de salir?
Si No

Cuál? _____

Busco ayuda medica? Si No

SOLO PARA MUJERES DE 14 A 55

30. Estaba embarazada antes de salir?
Si No (Pase a 23)

___ Mes de embarazo

31. Tuvo un parto, perdida o nacido muerto antes de salir?
Si (Registre en Informe sobre Partos) No

P

Informe Sobre Parto/Pérdida/Aborto

Comunidad _____
Manzana _____ Lote____ Código de Fam. ____

Fecha del Informe
___/___/___
Entrevistador(a)
_____

Sección 1. Información sobre la terminación.

1. Fecha ___/___/___ 2. Lugar _____

3. Quien la atendió _____

4. Tipo
___ Aborto o Pérdida (Pase a 30)
___ Nacido muerto (Pase a 30)
___ Nacido vivo
___ Nacidos vivos (Mellizos/Gemelos)

5. Método
___ Normal
___ Cesarea
___ Instrumental

Sección 2. Información sobre el niño.

		Segundo (en caso de Mellizos/Gemelos)
20. Sexo	H M	H M
21. Peso al nacer	_____ Kg.	_____ Kg.
22. Nombre	_____ (Anote en la hoja de control)	_____ (Anote en la hoja de control)

3. Número de días hospitalizado _____ _____

Sección 3. Información sobre la madre.

30. Nombre_____ Apellidos _____ No._____

31. Fué a consultar con alguien para controlar su embarazo?

No Sí

Desde que mes? _____ Mes

Cuántas veces fue en total? _____

Informe Sobre Defunción

Comunidad _____ Fecha del Informe
Manzana _____ Lote ____ Codigo de Fam. ___ ___/___/ ___
Entrevistador (a)
_____

Sección 1. Informacion sobre la defuncion.

1. Fecha ___/___/___ 2. Lugar Hospital/Clinica ___
Centro de Salud ___
En casa_____Otro ____

3. Causa de la muerte _____ Fue diagnostico de medico? Si No

(Pase a 5)

4. Sintomas antes de la muerte (Marque todas las aplicables)

	- 15 dias	15 + dias
Grave dificultad para respirar		
Diarrea con sangre y moco		
Diarrea aguda		
Quemaduras		
Accidente		
Envenenamiento		
Convulsiones		
Dolor de cabeza		
Fiebre		
Desnutrición		
Sarampión		
Tos		
Vomitos :		

5. Atencion medica que tuvo en los 15 dias antes de morir:
___ Hospital/Clinica ___Centro de Saluc ___Puesto ___Otro Medico
___ Farmacia ___ Nada ___ No sabe

6. Describa las circunstancias (orden de los sintomas) en las pocas horas a antes de la muerte.

_____
_____

Sección 2. Informacion sobre la persona fallecida.

20. Nombre _____ Apellidos _____ No ___

* (Para mujeres de 14 a 49 años solamente)

21. Estaba embarazada? ___ Si ___ No (Pase a 22)

___ Mes del embarazo

22. Estaba dandole pecho a su hijo menor? Si No

6

ANNEX 4

SAN JUAN CASE CONTROL QUESTIONNAIRE

CASE CONTROL QUESTIONAIRE - 1

SECCION I.

CATEGORIA:

Buenos dias. Pertenezco a PRISMA, una asociacion sin afiliacion religiosa ni politica. Trabajamos en un programa aqui en San Juan, y deseamos conocer mejor la situacion aqui a traves de Ud. como madre de familia.
Se trata de contestar unas preguntas sobre Ud. y su familia. Si hay algo que no entiende o que desea que repita, digame con franqueza. Lo que pido a Ud. es que sea lo mas franca conmigo, pues estoy aqui para aprender.

natimuerto ____
perinatal ____
infante ____
nino ____
desnutrido ____
vacunas ____
modelo ____
caso ____
control ____

CODIGO: _____
CASO CONTROL NRO: _____
NOMBRE: _____
SEXO: _____
NACIDO: ___/___/___
EVENTO: ___/___/___
ENCUESTADORA: _____
FECHA: ___/___/87

SECCION II:

1. Nombre de entrevistada/o _____ ___
2. Es Ud. la madre naturel de CC? si __ no __ ___
   si (pase a 7) no
3. La madre de CC vive? si __ no __ ___
   si (pase a 6) no
4. Cuando murio? ___/___/___ ___
5. De que fallecio? _____ ___
6. Desde cuando se puso Ud. a cargo de CC? _____ ___
   (pase a 52)

SECCION III.

(Solo si informante es madre biologica)

7. Antes de salir embarazada de CC, tuvo Ud. algun aborto espontaneo? si __ no __ ___

8. Tuvo Ud. alguna vez, antes de salir encinta de CC, una amenaza de aborto? si __ no __ ___

9. Antes de dar a luz a CC, le hicieron alguna cesarea? si __ no __

10. En algun parto antes del de CC, tuvieron que usar instrumentos para sacar al bebe? si __ no __

11. Cuando Ud. salio encinta de CC, Ud queria estar embarazada al comienzo? si __ no __
si (pase a 13) no/no en el momento

12. Entonces, si Ud. no queria, como es que salio embarazada?

Su esposo queria otro hijo __
No se estaba cuidando __
No se estaba cuidando porque no convivia. __
Le estaba dando pecho a su otro bebe __
Hacia poco que habia dado a luz __
No se estaba cuidando porque despues del ultimo parto, no habia regresado su regla __
No se estaba cuidando por desconocimiento o temor. __
Fallo el metodo que estaba usando. __
_____ otro __

13. Estando encinta de el/ella, Ud. trato de abortar alguna vez? si __ no __ __

14. Donde estuvo viviendo durante el ultimo mes del embarazo?

la misma casa __
_____ Lima, en otra casa __
_____ provincia __

15. Durante ese embarazo, fue Ud. alguna vez a controlarse? si __ no __ __
si no (pase a 24)

16. 1er trimestre _____(veces) _____(sitio) _
_____(veces) _____(sitio)

17. 2do trimestre _____(veces) _____(sitio) _
_____(veces) _____(sitio)

18. 3er trimestre _____(veces) _____(sitio) _

19. En alguna de esas visitas, se detecto algun problema? si __ no __

20. En alguna de esas visitas le recetaron algo? si __ no __
si no
|
Ud. llego a comprar todo lo que le recetaron? si __ no __

21. Le recomendaron unos analisis? si __ no __
si no
|
Ud. llego a sacarse todos los analisis? si __ no __

22. Le dieron algun otro consejo? si __ no __
si no
|
Ud. pudo seguir esos consejos? si __ no __

23. Le dijeron que estaba mal alimentada cuando estaba embarazada esa vez? si __ no __

24. Ud. tomo algun medicamento durante ese embarazo? si __ no __
si no (pase a 28)
|

25. 1er trimestre (nombre) _____
_____
_____

26. 2do trimestre _____
_____
_____

27. 3er trimestre _____
_____
_____

28. Cuando estuvo embarazada esa vez, hizo Ud. trabajo pesado, o realizo un esfuerzo? si __ no __
si no (pase a 32)
|
|

29. 1er trimestre _____

30. 2do trimestre _____

31. 3er trimestre _____

32. Donde dio a luz esa vez?

casa
_____ posta/centro ___
_____ clinica ___
_____ hospital ___
_____ otro ___

33. Como sabia que estaba por dar a luz?

dolores/contracciones
se lo rompio la fuente ___
sangrado ___
_____ otro ___

34. Antes de ir a (32), para dar a luz, Ud. fue a atenderse en otro lugar primerò?

si ___ no ___

35. Al nacer, el bebe lloro enseguida?

si ___ no ___

36. (Si notimuerto, pase a 39) Tenia CC un color amarillo (ictericia) al nacer?

si no

No ___

Quien lo noto primero? Ud?

madre misma lo noto
personal medico se lo indico ___
otro se lo indico ___
___

37. Tuvo el bebe algun (otro) problema desde nacimiento?

_____ si ___ no ___

38. Cuantos dias estuvo CC en el hospital/clinica luego del parto?

___

39. Cuantos dias estuvo internada Ud. luego de dar a luz?

___

40. Durante el embarazo, antes de dar a luz, sufrio Ud. de:

hinchazon de los pies
convulsiones ___
sangrado ___
fiebre ___
infeccion ___
___
_____ otro ___
ninguno ___

41. Luego del parto, Ud. sufrio de:

sangrado
fiebre ___
infeccion ___
___
_____ otro ___
ninguna ___

42. (Si notimuerto, pase a 46) Ud. le dio pecho a CC? si __ no __

si no (pase a 46)

Cuando tiempo? _____(meses)

43. Ud. le dio unicamente pecho durante un tiempo? _____ semanas

44. Se le rajo el pezon, o tuvo mastitis cuando estaba dando de lactar? si __ no __

si no

45. Porque dejo de darle pecho?

pezon rajado __
mastitis __
no tenia suficiente leche __
era mucho trabajo __
ya era grande __
salio encinta nuevamente __
_____ otro __

46. Estuvo Ud. mal de los pulmones alguna vez (TBC)? si __ no __

si no (pase a 50)

47. Recibio Ud. tratamiento? si __ no __

si no (pase a 50)

48. En que fecha termino su tratamiento? ___/___/__

49. Llego a terminar todo su tratamiento? si __ no __

50. Uso Ud. anticonceptivos poco despues de que nacio CC? si __ no __

si no (pase a 52)

Cuales?

pildora __
_____ otro __

51. A partir de cuando?

_____
_____
_____

SECCION IV.

(Si fallecimiento, pase a 58)

52. Llego Ud. a llevarlo a CC para su control de bebe sano. Se acuerda cuantas veces? si(veces)___ no__

53. Que enfermedades o accidentes ha tenido/tuvo CC? (mencione algunos)

enfermedad _____ ninguna ___
Meses
~~fecha~~ __/__
_____ __/__
_____ __/__

54. Estuvo CC internado alguna vez? si __ no __

si no
| |

problema	lugar	dias	fechas

55. A los cuantos meses empezo CC a tomar sopas o papillas?

56. A los cuantos meses empezo CC a...

levantar la cabeza __
sentarse __
decir mama, papa __
gatear __
caminar __

57. En comparacion con otros ninos de su edad, CC esta/estuvo

mas avanzado que ellos __
menos avanzado que ellos __
a nivel de ellos __
no sabe __
mas en unos aspectos, menos en otros __

Explicacion _____

SECCIÓN V

Los siguientes preguntas que le voy a hacer se refieren a la epoca de (mes/ano)_____hasta_____198__
(Tratar de dar referencias)
Ud. se ubica?

58.59. Con quienes vivio CC (si notimuerto, la madre de CC) en ese entonces?

madre
biologica ___
otra ___
padre
biologico ___
otro ___
hermanos ___
abuelos/tios/primos maternos ___
abuelos/tios/primos paternos ___
_____ otros ___

(Si vivia con informante, seguir con 60. Si no, pase a 77).

60. Donde estuvo viviendo en esa epoca?

misma casa ___
otra casa en Pampas ___
_____ otro lugar ___

61. Aparte de los que vivian en la casa, con cuales de sus parientes, de Ud. o de su esposo, se veian mas a menudo? Cada cuanto tiempo?

nunca ___
menos de una vez al mes ___
1 - 3 veces al mes ___
semanalmente ___
casi diario ___
diario ___

62. De estas personas que Ud. acaba de nombrar (58, 59 y 61), alguien estuvo enfermo o incapacitado en esa epoca? (preguntar especificamente por padre, madre y CC)

si ___ no ___

si no

Persona	Enfermedad	Duracion

63. Tenian Uds. Seguro Social?

si ___ no ___

si no (pase a 64) 65)

64. Lo usaron luego de venirse a vivir en esta zona?

si ___ no ___

65. Uds. se acuerdan, como estaban economicamente?

podian guardar un poco de dinero y hacer gastos mayores ___
tenian suficiente para la casa y otros gastos ___
tenian solo para comer ___
no les alcanzaba ni para comer ___

66. En esa epoca, sus ingresos eran estables? si ___ no ___

67. Su esposo (padre) tenia trabajo? si ___ no ___
si | no (pase a 69)
|
|

68. Cuantos dias a la semana trabajaba el fuera de casa? ___

69. Su esposo tenia hijos de otro compromiso? si ___ no ___
si | no
|
|
no sabe ___

Los estuvo manteniendo a ellos tambien? si ___ no ___
no sabe ___

70. Ud. estaba trabajando en ese entonces? si ___ no ___
si | no (pase a 73)
|
|

71. En que? _____

72. (Si notimuerto, pase a 73) Llevaba a CC consigo a su trabajo? si ___ no ___
a veces ___

73. Cuantas horas a la semana pasaba Ud. fuera de la casa? _____

74. (Si notimuerto, pase a 75) Cuando Ud. estaba ocupada, o tenia que salir a la calle, a CC:

lo dejaba solo ___
a cargo de otro nino ___ edad ___
a cargo de otra persona ___ edad ___
se lo llevaba ___

75. Ud. se acuerda si el agua que tenia en esa epoca le abastecia?

si, abastecia ___
no, no abastecia ___

76. Tenian letrina en ese entonces? si __ no __
si no
|
|
La usaban, funcionaba? si __ no __

77. Cuanta agua usan ahora, por semana?
balde, galonera chica __
galonera, tacho __
cilindros __
tanques __
_____otro __
no sabe __

78. Los abastece? si __ no __

Tienen letrina (silo)? si __ no __
si no (pase a 79)
|
|

La estan usando ultimamente? si __ no __

79. Cuantos cuartos tiene su casa ahora? ____

80. Cuantas camas, sofas u otros sitios _
usan para dormir? ____

81. Tienen Uds. familia, amigos o compadres
cerca de aca? si __ no __
si no
|
|
Cada cuanto tiempo los ven?
todos los dias __
cada semana __
unas veces al mes __
una vez al mes __
solo de vez en cuando __
casi nunca __

SECCION VI

82. Cual idioma hablan en casa mas?
castellano __
quechua __
aymara __
_____otro __

83. En cual idioma se siente mas comoda
al hablar?
castellano __
quechua __
aymara __
_____otro __

84. Ud. fue criada por sus padres naturales? si __ no __

85. A que edad salio Ud. de su casa (donde fue criada)? _____

86. Su propia ninez fue ...

alegre ___
triste ___
sufrida ___
sin preocupaciones ___

87. Su esposo fue criado por sus padres naturales?

si ___ no ___

88. A que edad salio el de su casa (donde fue criado)? _____

89. Para que un nino respete a sus padres tiene que tenerles .....

carino ___
miedo ___
un buen ejemplo ___
comprension ___

90. Mientras menos uno se junta con sus vecinos, mejor se lleva con ellos.

si ___ no ___

91. Cuando se enferman, quienes son mas fuertes, mas resistentes?

los bebes ___
los jovenes ___
los adultos ___
los ancianos ___

92. Hay un dicho, "Mas me pegas, mas te quiero". Es cierto?

siempre ___
nunca ___
a veces ___

93. Cuando una mujer embarazada pierde agua (se le rompe la fuente), quiere decir que.....

va a dar a luz dentro de pocas horas ___
hizo mucho esfuerzo y debe descansar. ___
el embarazo sigue normal ___
le entro aire ___
no sabe ___

94. Complete esta frase: El papa de mis hijos toma.....

todos los fines de semana ___
solo en reuniones familiares ___
varias veces a la semana ___
nunca ___

95. Cuando mi esposo llega a la casa .....

va a buscar a sus amigos ___
se echa a descansar ___
ayuda con la casa ___
ayuda con los ninos ___

96. La ultima vez que lo llevo a su hijo al medico.....

U.d.

sintio que ya lo hubiera curado en casa igual, sin medico ___
su hijo sano con la receta del medico ___
lo hizo mal lo que le recomendo el medico ___

97. (Indique mas de uno si es necesario)
Esa vez, antes de llevarlo al medico, Ud. le dio algo?

No

le dio una medicina que tenia en casa ___
le dio una medicina que le remendo una vecina ___
le dio un remedio casero ___
le dio una medicina que le recomendaron en la farmacia ___
espero que se le posara solo ___
una vecina trato de curarlo ___
un curandero o una curiosa trato de curarlo ___
fue a comprarle una medicina que ya habia usado antes ___

98. Cuando hablo con un medico, termino sintiendome.....

satisfecha ___
frustrada ___
despreciada ___
segura ___

99. La ultima vez que fui al medico, me trataron....

bien ___
bien, pero tuve que esperar ___
demasiado rapido ___
como cualquier cosa ___

100. A mis hijos les he pegado.....

duro ___
normal ___
muy de vez en cuando ___
nunca ___

101. La gente me conoce como una persona....

jovial y conversadora ___
seria o introvertida ___
activa y dedicada ___

102. A mi esposo cuando era chico, le pegaban...

duro ___
normal ___
casi nunca ___
no sabe ___

103. Si su hijito tuviera tos, fiebre, y su respiracion ~~estuba~~ agitada, que haria Ud.?
Estuviera

preguntar en la farmacia ___
frotarlo ___
llevarlo de emergencia ___
darle una antalgina y jarabe ___

104. Cual describe mejor la comunicacion entre Ud. y su esposo?

Mi esposo me cuenta casi todo. ___
Conversamos solo cuestiones importantes ___
Le pregunto que tiene, y se molesta. ___
Uno de nosotros es mas callado que el otro. ___

105. Digamos que su hijito tuviera un año de edad y que desde hace 3 dias estaba con diarrea. Estaba haciendo 5 deposiciones cada dia, y se veia un poco decaido. Que haria Ud? (Indique todos los que correspondan)

darle kaopectate ___
darle donafan ___
darle suero casero ___
darle un purgante ___
_____ otro ___

106. Cual describe mejor las relaciones entre Ud. y su esposo?

El es desconfiado ___
Yo soy desconfiada ___
Los dos somos desconfiados ___
Hay mutua confianza ___

107. Complete esta frase: Mis padres me pegaban...

por razones injustas ___
solo cuando yo me lo merecia ___
casi nunca ___

108. El padre de mis hijos les pega.....

duro ___
normal ___
muy de vez en cuando ___
nunca ___

109. Antes de criar a mis propios hijos, yo.....

tenia bastante experiencia con ninos pequenos ___
tenia algo de experiencia con ninos pequenos ___
no tenia mucha experiencia con ninos pequenos ___

110. Desde que empece a ocupar mi lote, pienso en vivir en otro lado.....

muy seguido ___
cuando se presenta un problema grande ___
de vez en cuando ___
casi nunca ___

111. Cual palabra describe mejor como actua su esposo hacia sus hijos?

carinoso ___ ___
indiferente ___
agresivo ___
preocupado ___

SECCION VII. Observaciones

112. Transporte publico esta a...

cuadras de la casa ___ ___

113. Aves caminan libremente en la casa.

si ___ ___
no ___
no obs. ___

14. Moscas estan encima de la comida.

si ___ ___
no ___
no obs. ___

115. La tierra se filtra por techo/pared.

si ___ ___
no ___
no obs. ___

116. Hijos menores estan sucios.

si ___ ___
no ___
no obs. ___

117. Hijos menores estan mal vestidos.

si ___ ___
no ___
no obs. ___

118. Problema de salud/desarrollo no mencionado por informante:

_____ salud ___ ___
_____ desarrollo verbal ___
_____ desarrollo motor ___

Comentarios _____

_____

_____

ANNEX 5

CAJAMARCA CENSUS AND SURVEILLANCE FORM

Distrito _____ PRISMA Empadronador(a)_____
Comunidad _____ Fecha ___ ___ 198__
Cod. de Familia _____ CENSO DE HOGARES Día Mes Año

Podría darme su nombre, el de su esposo, de sus hijos de mayor a menor, y de todas las otras personas que viven con Ud.?

		PERS. 06	PERS. 07	PERS. 08	PERS. 09	PERS. 10
1.	Nombre	.....	.....	.....	.....	.....
2.	Apellidos	.....	.....	.....	.....	.....
		.....	.....	.....	.....	.....
3.	Parentesco		_____	_____	_____	_____
4.	Sexo	H M	H M	H M	H M	H M
5.	Cuántos años ha cumplido?	_____	_____	_____	_____	_____
6.	Es solt, cas, conv, viud, sep, divor	.....	.....	.....	.....	.....
7.	Vive en esta casa	sí no	sí no	sí no	sí no	sí no
8.	Dpto donde nació?	.....	.....	.....	.....	.....
9.	Dpto. donde vivió desde los 9 hasta los 15 años.	.....	.....	.....	.....	.....
11.	Cuántos años esta en (Comunidad)?	.....	.....	.....	.....	.....
12.	Hasta qué año estudió?	_____	_____	_____	_____	_____
13.	No. de madre	.....	.....	.....	.....	.....
14.	No. de padre	.....	.....	.....	.....	.....
	* (SOLO PARA PERSONAS DE 6 AÑOS Y MAS)*					
20.	En qué trabaja?	_____	_____	_____	_____	_____
	Qué hace?	_____	_____	_____	_____	_____
21.	Es por su cuenta?	sí no	sí no	sí no	sí no	sí no
26.	Recibe algún pago?	sí no	sí no	sí no	sí no	sí no
22.	Estable o eventual?	_____	_____	_____	_____	_____
23.	Alguien le ayuda?	sí no	sí no	sí no	sí no	sí no
24.	Le(s) da algún pago?	sí no	sí no	sí no	sí no	sí no
25.	(SOLO PARA VENTA)					
	Dónde vende?	_____	_____	_____	_____	_____
	Qué vende?	_____	_____	_____	_____	_____
	* (SOLO PARA MUJERES DE 12 A 55 AÑOS)*					
	De sus hijos nacidos vivos:					
31.	Cuántos viven en esta casa?	H___ M___	H___ M___	H___ M___	H___ M___	H___ M___
32.	Cuántos viven en otro lugar?	H___ M___	H___ M___	H___ M___	H___ M___	H___ M___
33.	Cuántos han muerto?	H___ M___	H___ M___	H___ M___	H___ M___	H___ M___
	* (PARA NINOS MENORES DE 5 ANOS DE EDAD)*					
40.	Fecha nacimiento.	___/___/___	___/___/___	___/___/___	___/___/___	___/___/___
41.	Peso Kg.	___.__	___.__	___.__	___.__	___.__
42.	Talla cm.	___.__	___.__	___.__	___.__	___.__
43.	Día/Mes/Año	___/___/___	___/___/___	___/___/___	___/___/___	___/___/___
44.	Tarjeta Vacuna	si no	si no	si no	si no	si no
45.	TBC (número)	___	___	___	___	___
46.	DPT (número)	___	___	___	___	___
47.	Polio (número)	___	___	___	___	___
48.	Sarampión	___	___	___	___	___
49.	Cicatriz	si no	si no	si no	si no	si no
49a.	Control de niño sano:					
	total de veces	_____	_____	_____	_____	_____
	fecha de última visita	___/___/___	___/___/___	___/___/___	___/___/___	___/___/___

PARA CADA MUJER DE 12 A 55 AÑOS DE EDAD QUE VIVA EN LA CASA

PRISMA

Distrito _____
Comunidad _____
Cód. de Fam. _____

Empadronador(a)_____
Fecha ___ ___ 198__
Día Mes Año

Persona número _____ Nombre _____ Apellido _____
Edad (años) _____ Nivel de Instrucción _____

60. A qué edad le bajó la sangre por primera vez (menstruar)? ____ años
61. Ha salido en estado alguna vez? sí no > PASE A 68
62. A qué edad salió en estado por primera vez? ____ años
    Qué edad tenía Ud. cuando terminó su primer embarazo? ____ años
63. Cuántos de sus hijos han nacido vivos? ____ H___ M___
64. Cuántos nacieron muertos? ____
65. Cuántas pérdidas (malogrado) ha tenido? ____
66. Cuántos de sus hijos han muerto? ____ H___ M___
67. Cuántas veces en total ha salido en estado? ____
68. Ahora está Ud. en estado? sí no no sabe

Ud. quería salir en estado?
sí no

En qué mes (de embarazo) está?
___ mes

Ha ido a control para ver como está el niño?
sí no >PASE A 80

Con quién? nombre_____
oficio _____

Desde qué mes?
___ mes

Cuántas veces ha ido?
___ No. PASE A 80

Hace cuántas semanas le bajó la sangre la última vez?
___

69. Quisiera salir en estado ahora? sí no
70. Está haciendo algo para no salir en estado? sí (especifique) _____
    no
71. Se está cuidando con ___el mes ___su esposo la cuida (retiro)? (PASE A 80)
    ___no

72. (SI NO ESTA USANDO NINGUN METODO)
    Por qué no se está cuidando ahora? _____

(SI NUNCA HA ESTADO EMBARAZADA, PASE A 50)

80. Quisiera preguntarle sobre todas las veces que ha salido en estado en los últimos 5 año
(EXCEPTO EMBARAZO ACTUAL).

	Ultimo Embar	Penúl Embar	Antep Embar	Embar Anter	Embar Anter	Embar Anter	Embar Anter
81. En qué mes y y año terminó	mes	mes	mes	mes	mes	mes	mes
	año	año	año	año	año	año	año
	(SI ESTA FECHA ES ANTES DE 1982, FIN DE SECCION)						
82. Como se terminó? Aborto o Pérdida..	___ >	___ >	___ >	___ >	___ >	___ >	___
Nacido Muerto...	___ >	___ >	___ >	___ >	___ >	___ >	___
Nacido Vivo....	___	___	___	___	___	___	___
Mellizos/ Gemelos.	___	___	___	___	___	___	___
(EN CASO DE MELLIZOS O GEMELOS NACIDOS VIVOS, USE UNA COLUMNA PARA CADA HIJO)							
83. Dónde dió a luz?	.....	.....	.....	.....	.....	.....	....
84. Quién la atendió?	___	___	___	___	___	___	___
85. Cómo fue su parto?	___	___	___	___	___	___	___
86. Fue hombre o mujer?	H M	H M	H M	H M	H M	H M	H M
87. Cuánto pesó al nacer?	___ kg	___ kg	___ kg	___ kg	___ kg	___ kg	___ kg
88. Está vivo?	sí no	sí no	sí no	sí no	sí no	sí no	sí no
	(SI - PASE A 91 NO - CONTINUE)						
89. En qué mes y año murió?	___ mes	___ mes	___ mes	___ mes	___ mes	___ mes	___ mes
	___ año	___ año	___ año	___ año	___ año	___ año	___ año
90. De qué murió? (especifique)	___	___	___	___	___	___	___
91. Le dió pecho?	sí no >	sí no >	sí no >	sí no >	sí no >	sí no>	sí no>
	(MUERTOS PASE 93)						
92. Todavía le está dando pecho?	no sí >	no sí >	no sí >	no sí >	no sí >	no sí>	no sí>
93. Por cuántos meses le dió pecho? (MARQUE 97 SI LE DIO PECHO HASTA QUE SE MURIO)	___ meses	___ meses	___ meses	___ meses	___ meses	___ meses	___ meses

56. Tienen: ____Seguro Social ___Otro seguro médico

51. Tiene (o ha tenido en los últimos 15 días) alguna enfermedad Ud., su esposo o uno de sus hijos (u otras personas que viven con Ud.)?

No	Sí		Desde cuándo? (días)			Alguien le atendió?					
	Nombre	Problema	Ø-7	8-3Ø	31+	Hosp/ Clín.	Posta	Méd. Part.	Farm	Otro (Especif)	No
	_____	_____	___	___	___	___	___	___	___	_____	___
	_____	_____	___	___	___	___	___	___	___	_____	___
	_____	_____	___	___	___	___	___	___	___	_____	___

53. La última vez que uno de sus hijos estaba muy enfermo, qué tenía?
_____
Qué hizo? _____
Cuál de sus hijos _____ Edad _____

54. Cuando fue la última vez que fue al Puesto de Salud? Hace _____
Para qué? _____

55. Cuánto tiempo demora en llegar al Puesto de Salud más cerca? ____horas
Cuánto tiempo demora en regresar? ____horas
total ____horas
Cómo? __a pie __a caballo __otro _____

Distrito _____ Empadronador(a) _____
Comunidad _____ Fecha ___ ___ 198__
Código Familia _____ Día Mes Año

DETALLES DE VIVIENDA

100. Material de Construcción: Paredes _____ Techo _____ Piso _____

101. Ustedes son...? ___ propietario ___inquilino ___ posado (alojado)
___ otro (especif)_____

109. Qué tamaño es su terreno (en total)? _____
Aparte arriendan? (cantidad) _____

110. Qué cantidad tienen de: ____ vacas ____ ovejas ___ caballos/burros
____ gallinas ___ chanchos (coches)
____ otros _____ ___ cuyes/conejos

102. De dónde trae su agua? ___ Manante ___ Pila ___Puquio ___conexión domiciliaria
___ Río ___ Acequia ___Pozo ___otro _____

111. A qué distancia queda? (tiempo) _____

103. En qué guarda su agua? ___Cántaro/Urpo ___Cilindro ___Baldes ___Otro _____

104. Está tapado? Sí No

105. Qué usa para alumbrar la casa? ___ mechero ___lámpara(kerosene) ___petromax
___ electricidad ___otro _____

106. Donde hacen el cuerpo? ___inodoro ___ Silo/letrina ___Campo Abierto

(SOLO PARA PADRES DE FAMILIA)

107. A qué horas escucha Ud. radio? _____
Qué programas escucha? _____

108. A qué horas ve Ud. televisión? _____
Qué programas ve? ___ ___ _____

120. Cuál es la mejor hora y día para vistarle?

HORA	DIA						
_____	L	M	M	J	V	S	D
_____	L	M	M	J	V	S	D

VISITAS			CITAS		
ENTREVISTADOR(A)	FECHA	HORA	No. PERSONA	FECHA	HORA

Observaciones _____

PRISMA

HOJA DE VIGILANCIA FAMILIAR

Distrito _____
Comunidad _____
Código de Familia _____
CENSO

FECHA(DIA/MES/AÑO) __/__/__/ ___/ ___/ ___/ .:

Personas Residentes	Para niños menores de : 5 años			3 años			
NOMBRE	Cambio	Vacuna-cion	Cica-triz	Peso	Talla	Fe -cha	Lac
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
Entrevistador (a)							

Còdigos para: a) Cambios

N: ningùn cambio

I: Inmigrante desde la ùltima vuelta

E: Emigrante desde la ùltima vuelta

F: Fallecimiento

P: Parto/Pèrdida/Aborto

M: Embarazo (marque M para cada vuelta a la cual la mujer dice que està embarazada no solamente a la primera)

R: Recièn nacido

C: Estado civil

b) Vacunaciòn

B ___: BCG (nùmero)

D ___ : DPT (Triple)(nùmero)

S: Antisarampiòn

P: Antipolio (nùmero)

c) Lactancia Materna

C: Completa

M: Mixta

N: No le da pecho

E.

Informe sobre Persona Emigrante

Fecha del Informe ___/___/___

Distrito _____
Comunidad _____
Código de Familia _____

Entrevistador (a) _____

Sección 1. Información sobre la emigración

1. Fecha ___/___/___

2. Razón _____
No se sabe ____

3. Destino ___ Otra casa de la comunidad*
___ Otra comunidad de Hualgayoc o Chugur*
___ Otro distrito de Cajamarca
___ Otro departamento
___ Otro país

* Dirección _____.

Sección 2. Información sobre la persona emigrante

20. Nombre _____ Apellidos _____ No. ____
21. Tenía alguna enfermedad o problema de salud antes de salir?
Sí No

Cuál? _____

Buscó ayuda médica? Sí No

SOLO PARA MUJERES DE 14 A 55

30. Estaba embarazada antes de salir?
Sí No (Pase a 23)

___ Mes de embarazo

31. Tuvo un parto, perdida o nacido muerto antes de salir?
Sí (Registre en Informe sobre Partos) No

P

Informe Sobre Parto/Pèrdida/Aborto

Distrito _____
Comunidad _____
Código de Familia _____

Fecha del Informe
___/___/___
Entrevistador(a)
_____

Secciòn 1. Informaciòn sobre la terminaciòn.

1. Fecha ___/___/___ 2. Lugar _____

3. Quién la atendió _____

4. Tipo
___ Aborto o Pèrdida (Pase a 30)
___ Nacido muerto (Pase a 30)
___ Nacido vivo
___ Nacidos vivos (Mellizos/Gemelos)

5. Mètodo
___ Normal
___ Cesàrea
___ Instrumental

Secciòn 2. Informaciòn sobre el niño.

		Segundo (en caso de Mellizos/Gemelos)
20. Sexo	H M	H M
21. Peso al nacer	_____ Kg.	_____ Kg.
22. Nombre	_____ (Anote en la hoja de control)	_____ (Anote en la hoja de control)
3. Número de dias hospitalizado	_____	_____

Secciòn 3. Información sobre la madre.

30. Nombre_____ Apellidos _____ No._____

31. Fuè a consultar con alguien para controlar su embarazo?

No Si

Desde què mes? _____ Mes

Cuàntas veces fue en total? _____

Informe Sobre Defunciòn

Distrito _____
Comunidad _____
Código de Familia _____

Fecha del Informe
___/___/___
Entrevistador (a)
_____

Seccion 1. Informaciòn sobre la defunciòn.

1. Fecha ___/___/___

2. Lugar Hospital/Clinica ___
Centro de Salud ___
En casa_____Otro _____

3. Causa de la muerte _____ Fue diagnòstico de mèdico? Si No
(Pase a 5)

4. Sintomas antes de la muerte (Marque todas las aplicables)

	- 15 dias	15 + dias
Grave dificultad para respirar		
Diarrea con sangre y moco		
Diarrea aguda		
Quemaduras		
Accidente		
Envenenamiento		
Convulsiones		
Dolor de cabeza		
Fiebre		
Desnutriciòn		
Sarampiòn		
Tos		
Vòmitos		

5. Atenciòn mèdica que tuvo en los 15 dias antes de morir:
___ Hospital/Clinica ____Centro de Salud ___Fuesto ___Otro Mèdico
___ Farmacia ___ Nada ___ No sabe

6. Describa las circunstancias (orden de los sintomas) en las pocas horas a antes de la muerte.
_____
_____

Seccion 2. Informaciòn sobre la persona fallecida.

20. Nombre _____ Apellidos _____ No. ___

* (Para mujeres de 14 a 49 años solamente)

21. Estaba embarazada? ___ Si ___ No (Pase a 22)
___ Mes del embarazo

22. Estaba dàndole pecho a su hijo menor? Si No

ANNEX 6

CAJAMARCA CASE-CONTROL FORM

ESTUDIO DE CASO-CONTROL: CAJAMARCA

Caso / Control Nº _____ _____ __/__/__

Entrevistador(a) Fecha

__ perinatal
__ infante
__ niño
__ desnutrido
__ vacunas

_____ _____

Código Nombre de Madre

_____(*) __/__/__

Nombre de Niño F. Nac.

El propósito de este censo, y de nuestro trabajo en general, es ver cómo se podria mejorar la salud de todos aquí en Hualgayoc/ Chugur.

Para esto, a veces necesitamos información específica sobre la salud y el bienestar de Ud. y su familia. Al contestar nuestras preguntas lo más exacto posible, Ud. estará ayudándonos a cumplir con nuestro trabajo, y con nuestro compromiso con todas las comunidades.

---

1. * ahora tiene __ meses. (verificar)

2. ¿Qué le da(ba) de comer, aparte de pecho?
   __ únicamente pecho (pase a 3)
   __ otra leche, con o sin pecho (pase a 3)
   __ sopa o comida
   ¿Cuándo empezó? A los __ meses. 2.__

3. ¿Cuándo fue la primera vez que tomó aguita? A los __ días/meses. 3.__

4. ¿Tuvo Ud. algún problema de salud cuando estuvo en estado con *? (Luego que la Sra. conteste, lee las opciones restantes.)

   síntoma / duración (semanas)

   - dolor de cabeza __
   - piernas hinchadas arriba de las rodillas __
   - poco apetito __
   - cansancio (agotamiento) __
   - ardor al hacer pichi __
   - diarreas frecuentes __
   - fiebre __
   - sangrado, hemorragia __
   - _____ __ 4.__

5. Muchas veces sentimos dolores o molestias durante un tiempo, sin hacerles mucho caso. ¿Ud. tiene alguna molestia o enfermedad, desde antes de que naciera *, que no se ha curado todavía (dolor, infección, picazón, debilidad)? _____
   _____ 5.__

9

6. A algunas personas se les aparece una bola en el cuello (señale) que se llama bocio.
¿Tiene Ud. bocio? sí no (pase a 7)

¿Desde cuándo lo tiene? _____
__ antes de que naciera •
__ después de que nació • 6.__

7. Tal vez Ud. ha escuchado que el licor puede afectar a la salud de uno, sobre todo la presión y el hígado. ¿Su esposo toma...
__ todos los fines de semana?
__ sólo de vez en cuando?
__ varias veces a la semana?
__ nunca? 7.__

8. A veces el hombre le pega a su mujer, como un forma de mostrarle su cariño, su preocupación, o su autoridad. En esta comunidad, ¿diría Ud. que los hombres pegan...
__ poco?
__ regular?
__ mucho? 8.__

9. Su esposo de Ud. le pega...
__ casi nunca (o nunca)?
__ de vez en cuando?
__ muy seguido?
__ sólo cuando ha tomado mucho? 9.__

10. Muchos padres de familia pegan a sus hijos para castigarlos, para llamarles la atención, o para que respeten a sus mayores. Este último año, Ud. y su esposo han tenido que pegar a sus hijos...
__ casi diario?
__ unas veces al mes?
__ muy de vez en cuando?
__ nunca? 10.__

11. ¿Cuántas camas, catres, u otros sitios usan para dormir? ___ 11.__

12. Y eso, ¿es para cuántas personas? __ 12.__

13. ¿Qué usa Ud. para cocinar?...
__ leña
__ kerosene
__ _____ 13.__

14. ¿Ud. cocina...
__ en el mismo cuarto donde duermen?
__ en otro cuarto? 14.__

15. Hoy, o ayer, mientras Ud. estuvo cocinando, ¿dónde estuvo *?

__ en su espalda o a su costado
__ dentro del mismo cuarto
__ en otro lugar 15.__

16. ¿Alguna vez este año, uno de sus hijitos tuvo tos?

sí no (pase a 17)
|
|

__ Botaba flema blanca o amarilla?
__ Le salía moco blanco o amarillo de la nariz?
__ Tenía dolor en el oído?
__ Tenía la respiración rápida o agitada?
__ Tenía poco apetito?
__ Tenía fiebre? 16.__

(Si presentaba tres (3) o más de estos signos, pase a 17.
Si presentaba dos (2) o menos, pase a 19.)

17. ¿Hizo Ud. algo para curarlo(la), o sanó solito(a)?

__ sanó solo
__ le dió un remedio casero (hierbas o frotación)
__ lo llevó a un médico de campo (curandero)
(pase a 19)

Le dió una medicina recetada por...
__ sí misma, un familiar, o una vecina
__ el promotor de salud
__ la farmacia
__ un médico o enfermera 17.__

18. Si yo menciono los nombres de algunos medicamentos, ¿me podría decir si le dió uno de ellos -- o sea, un antibiótico?

__ Penicilina: Megacilina / Acipen VK
__ Ampiclina: Binotal
__ Amoxiclina: Amoxil / Velamox
__ Eritromicina: Pantomicina / Ilosone
__ Trimetoprim: Septrin / Bactrim
__ Oxacilina: Posipen / Cervantal
__ Cloranfenicol: Cloromicetin / Quemicetina 18.__

Igual como controlamos el peso y talla de los niños para ver si están creciendo como deberían, también estamos midiendo a sus madres, para ver el estado nutricional de ellas.

19. Talla (parada): _____cms. 19.__

20. Circunferencia braquial: _____cms. 20.__

ANNEX 7

LIMA SEMINAR

SEMINARIO: *Enfoque de Riesgo para la Atención Materno-Infantil a nivel de la Comunidad*

OBJETIVOS

OBJETIVO GENERAL

Promover, a través de conferencias, páneles y discusión de resultados, el análisis del enfoque de riesgo como una estrategia básica de Atención Primaria de Salud que permite extender la cobertura de los servicios a los grupos más vulnerables, incrementando el impacto de los programas y facilitando la participación de la comunidad.

Objetivos Específicos:

a. Analizar el potencial del enfoque de riesgo en la ampliación de la cobertura y el incremento del impacto de los servicios de salud materno-infantil

b. Revisar los mecanismos más eficientes para que la comunidad participe en los programas de salud en general y en el enfoque de riesgo en particular.

c. Analizar el rol del promotor en la atención materno-infantil y en el enfoque de riesgo.

d. Evaluar los resultados preliminares de una investigación operacional sobre enfoque de riesgo

e. Revisar problemas comunes y soluciones prácticas en los programa de capacitación de promotores de salud.

Población objetivo:

Profesionales Multidisciplinarios de Centros y Puestos de Salud del Ministerio y de las Organizaciones Privadas Voluntarias de Salud.

SEMINARIO: *Enfoque de Riesgo para la Atención Materno-Infantil a nivel de la Comunidad*

RESUMEN DE LOS TEMAS

Tema 1:
Lineamientos de Politica de Salud en Marcha (Exposición)

Los Lineamientos de Salud continúan siendo el resumen y, a la vez, el marco de referencia para todos los esfuerzos que se hacen por mejorar las condiciones de salud de la población. Su discusión y análisis es entonces permanente, ya que conforme se obtienen nuevas experiencias el significado y la aplicación de cada lineamiento se enriquece constentemente. El tema central de este seminario, así como los relacionados a la Participación Comunitaria, al rol del Promotor y a la coordinación inter-institucional merecen resaltarse dentro de este marco de referencia a fin de dar a los participantes, ejemplos prácticos de su aplicación.

Tema 2.
Participación Comunitaria (Pánel)

En general las diferentes concepciones de participación comunitaria incluyen un rango súmamente amplio que va desde las que se limitan a interpretarla como la obligación de la gente de cumplir con utilizar los servicios en el dia, la hora y el lugar que se les indique, hasta los que proponen que la comunidad debe participar en forma equitativa en la planificación, ejecución, supervisión y evaluación de los servicios. Dentro de este ejercicio académico, el médico del nivel periférico se queda sin ningún elemento concreto y práctico que le permita abrir, iniciar y mantener el proceso de participación comunitaria. Al respecto se espera obtener algunos de esos elementos que faciliten la participación comunitaria en la atención materno-infantil y en el enfoque de riesgo.

Tema 3.
Rol del Promotor de Salud en la atención materno infantil y el enfoque de riesgo (Pánel)

El rol del promotor de salud es definido en forma muy variada por los programas que los utilizan. Más aún, la percepción de este rol es susbtancialmente diferente cuando se considera el punto de vista de los responsables del programa, del promotor mismo y de la comunidad a la que sirve. Es deseable iniciar un proceso a través del cual se puedan establecer requisitos y estandarizar conocimientos y habilidades minimas que todo promotor debe desarrollar para ser considerado como tal y, a la vez, lograr un mayor concenso en cuanto su rol en los diferentes programas de salud en que participa

Tema 4.
Utilización del Enfoque de Riesgo. (Conferencia)

Utilizando los tres temas anteriores como marco de referencia, se propone revisar el potencial del enfoque de riesgo para ampliar la cobertura de los servicios de atención materno-infantil y para incrementar su impacto, al intensificar la atención a las familias en más alto riesgo de morbilidad y mortalidad. Se espera revisar las implicaciones programáticas en cuanto a cobertura, sistema de referencia, modificación del riesgo, entrenamiento de personal y los beneficios a nivel de la familia y la comunidad en cuanto al desarrollo de su capacidad para identificar prioridades y para autocuidar su salud.

Tema 5
Investigación operacional en Enfoque de Riesgo (Exposición)

En esta presentación se describen los aspectos fundamentales -hipótesis, objetivos, estrategias y metodologies del programa de investigación operacional que actualmente ejecuta la Asociación Benéfica PRISMA. En el mismo se persigue desarrollar un modelo, replicable a nivel periférico, que permita identificar las familias de la comunidad que están en más alto riesgo respecto a la salud y la vida de los niños menores de 5 años, a fin de poder intensificar la labor del promotor y otros miembros del personal de salud, en la atención de estas familias. La presentación utilizará como puntos de referencia los conceptos desarrollados en los temas anteriores.

Tema 6.

Identificación de los Factores de Riesgo (Exposición)

Se describen los resultados preliminares del proyecto de investigación operacional, analizándolos en relación a las hipotesis de trabajo, discutiendo los aspectos metodológicos, identificando sus aplicaciones inmediatas y sus implicaciones para las etapas siguientes de la investigación. Todo esto se analiza dentro de un marco de referencia que describe en términos generales las principales características de la población en el área.

Tema 7.

Promotores de Salud: Ilusión y realidad (Pánel de Promotores)

Este panel da oportunidad a un grupo de promotores, provenientes de diferentes organizaciones y programas, de exponer durante 6 minutos sus respuestas a cuatro preguntas:

a) ¿Por qué soy promotor? (qué lo motiva)
b) ¿Para qué soy promotor? (lo que quiere lograr)
c) ¿Qué posibilidades encuentro de hacer un buen trabajo en mi comunidad?
d) ¿Qué obstáculos encuentro para hacer un buen tabajo en mi comunidad?

Esperamos con éllo, estar falicilitando el acceso de los promotores a tribunas que generlamente están reservadas para otro nivel de personal de salud y, a la vez, dar la oportunidad de exponer por sí mismos sus logros y dificultades.

Tema 8

Promotores de Salud: Motivación y Deserción. (Pánel)

En este panel, integrado por personal que trabaja con promotores de salud, se discute uno de los temas que más frecuentemente se menciona entre los problemas más serios de los programas de promotores de salud. Dicho problema ha generado las más diversas opiniones, a favor y en contra, de la utilización de promotores de salud en los programas de Atención Primaria. Se espera analizar los mecanismos a través de los cuales algunos grupos han logrado capacitar y mantener por largo tiempo promotores voluntarios de salud.

Tema 9

Promotores de Salud: Metodologías de Capacitación y Evaluación. (Panel)

Los panelistas, provenientes de grupos que diseñan y ejecutan programas de capacitación de promotores, harán una revisión de las metodologias más frecuentemente propuestas y de las adaptaciones que han sido realizadas a fin de responder a las caracteristicas y necesidades, tanto de sus promotores como sus propios programas.

NOTA: adicionalmente habrá dos sesiones de trabajos de grupo en las que los participantes (profesionales multidisciplinarios el primer día y aquellos más promotores de salud, el segundo día), podrán discutir y manifestar como grupo, sus reacciones a los planteamientos del seminario.

SEMINARIO

Enfoque de Riesgo

para la atención Materno-Infantil a nivel de la Comunidad

Programa

Lima, 28-29 de Agosto de 1987

MINISTERIO DE SALUD
UNIDAD DEPARTAMENTAL
DE SALUD - LIMA SUR

A.B. PRISMA
Proyectos en
Informática, Salud,
Medicina y Agricultura.

PRESENTACION

El presente seminario se realiza con el auspicio de la Unidad Departamental de Salud-Lima Sur (UDSLS) y de la Asociación Benéfica PRISMA, en un esfuerzo de cooperación inter-sectorial y con el propósito de promover y facilitar la participación de los equipos multidisciplinarios de salud en la revisión, análisis y mejoramiento de las estrategias básicas para la atención materno-infantil.

OBJETIVOS

Objetivo General

Promover, a través de conferencias, páneles y discusión de resultados, el análisis del enfoque de riesgo como una estrategia básica de Atención Primaria de Salud que permite extender la cobertura de los servicios a los grupos más vulnerables, incrementando el impacto de los programas y facilitando la participación de la comunidad.

Objetivos Específicos:

a. Analizar el potencial del enfoque de riesgo en la ampliación de la cobertura y el incremento del impacto de los servicios de salud materno-infantil.

b. Revisar los mecanismos más eficientes para que la comunidad participe en los programas de salud en general y en el enfoque de riesgo en particular.

c. Analizar el rol del promotor en la atención materno-infantil y en el enfoque de riesgo.

d. Evaluar los resultados preliminares de una investigación operacional sobre enfoque de riesgo.

e. Revisar problemas comunes y soluciones prácticas en los programa de capacitación de promotores de salud.

POBLACION OBJETIVO

Profesionales Multidisciplinarios y Promotores de Salud de Centros y Puestos de Salud del Ministerio y de las Organizaciones Privadas Voluntarias.

METODOLOGIA

Revisión de temas, conferencias, exposiciones, páneles y trabajos de grupo. Para los trabajos de grupo se incluyen dos guías de discusión para que los asistentes profundicen el análisis de lo expuesto en el seminario.

Día I: VIERNES 28 de AGOSTO

Conceptos y Estrategias

8:30 **Bienvenida**
Dr. Ramiro Prialé,
Presidente Asociación Benéfica PRISMA.

8:40 **Inauguración**
Dra. Ilda Urizar,
Ministra de Salud.

8:50 **Lineamientos de Política Nacional de Salud en Marcha**
Dr. Tomás Pinna Guerrero,
Director de la UDSLS.

9:25 **Panel I:**
Participación de la Comunidad
Moderadora: Dra. Ana Mariñez, *HAMA.*
Panelistas: Dr. Daniel Purcallas, *OPS.*
Dr. Mario Tavera, *INSAP.*
Lic. María Florencio, *UDSLS.*
Dr. Rodulfo Reto, *MS*

10:25 **Café**

VIERNES 28...

10:50 Panel II:
Rol del Promotor de Salud
Moderadora: Dra. Luz Marina Ponce, *Puentes de Salud*
Panelistas: Dr. Oscar Liendo, *UNICEF*
Dr. Porfirio Avila, *UDSLS*
Dr. Diego Fernández-Concha, *PRISMA*

11:50 Conferencia:
Uso del Enfoque de Riesgo
Dr. Javier Torres Goitier, *OPS*

12:50 Trabajo de Grupos

13:50 Refrigerio

14:30 Exposición:
Investigación operacional en Enfoque de Riesgo
Dra. Josephine Gilman, *PRISMA*

15:30 Lectura de Homologación del Trabajo de Grupos

Dia II. SABADO 29 de AGOSTO

Resultados y Experiencias

8:30 Exposición:
Historia de Casos para identificar Factores de Riesgo
Dra. Annabel Sherk, *PRISMA*

9:30 Panel III:
Promotores de Salud en Acción
Moderadora: Lic. María Elena Loayza, *UDSLS*
Panelistas: Promotores de Salud de diferentes organizaciones y programas

10:30 Café

11:00 Panel IV:
Promotores de Salud:
Mística de Trabajo
Moderadora: Sic. Teresa Fernández, *Fundación Bernard Van Leer*
Panelistas: Dra. Milagros Rojas, *HAMA*
Dr. Wilfredo Gutiérrez, *P.S.C*
Dra. Marilú Chiang, *PRISMA*

SABADO 29...

12:00 Panel V:
Promotores de Salud:
Metod. de Capacitación y Evaluación
Moderador: Dr. Guillermo Guerra, *UDSLS*
Panelistas: Dr. Fermín Avila, *MS*
Slc. Hugo Palomino, *PRISMA*
Enf. Miriam Strull, *UDSLS*
Cap. Soledad Ayala, *EDAPROSPO*

13:00 Trabajo de Grupos

14:00 Refrigerio

15:00 Lectura de Homologación de Trabajo de Grupos

15:30 Clausura y Entrega de Certificados

ANNEX 8

CAJAMARCA SEMINAR

MINISTERIO DE SALUD
Unidad Departamental de Salud
Cajamarca

Asociación Benéfica Prisma

P R O G R A M A

I Seminario Regional del Norte

"ENFOQUE DE RIESGO"

para la Atención Materno-Infantil a nivel de la comunidad

1 y 2 de Diciembre de 1988.

Cajamarca - Perú

INDICE

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B. Objetivos Específicos

II. METODOLOGIA

III. ASPECTOS ADMINISTRATIVOS

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B. Organismos Responsables

C. Participantes

D. Financiamiento

E. Presupuesto para Alimentación

INTRODUCCION

La Dirección de la Unidad Departamental de Salud de Cajamarca, y la Asociación Benéfica PRISMA, ante la responsabilidad de contribuir a los logros de los objetivos de Política del sector, y en el establecimiento de estrategias locales para extender las coberturas en condiciones óptimas con el objeto de alcanzar la meta de salud para todos en el año 2000, ha programado la realización del Seminario Regional del Norte "Enfoque de Riesgo para la Atención Materno Infantil a nivel de la comunidad", con el propósito de promover y facilitar la participación de los equipos Multidisciplinarios de Salud en la revisión, análisis y mejoramiento de las estrategias básicas para la atención Materno Infantil.

I. OBJETIVO

A. Objetivo General

Promover, a través de conferencias, paneles y discusión de resultados, el uso del enfoque de riesgo como una estrategia básica de Atención Primaria de Salud que permite extender la cobertura de los servicios a los grupos más vulnerables, incrementando el impacto de los programas y facilitando la participación de la comunidad.

B. Objetivos Específicos

1. Analizar el potencial del enfoque de riesgo en la ampliación de la cobertura y el incremento del impacto de los servicios de salud materno infantil.
2. Identificar mecanismos para aplicar la estrategia de riesgo a los programas de atención materno-infantil.
3. Analizar el rol del promotor en la atención materno-infantil y en el enfoque de riesgo.
4. Revisar problemas comunes y soluciones prácticas en los programas de capacitación de Promotores de salud.

II. METODOLOGÍA

La metodología a utilizarse será eminentemente participativa y dinámica, conferencias, exposiciones, paneles y trabajo de grupo. Para los trabajos de grupo se incluirán guías de discusión de acuerdo a los temas expuestos en el Seminario y plenarias con resultados de los trabajos de grupo.

III. ASPECTOS ADMINISTRATIVOS

A. Sede - Fecha - Horario

El evento se llevará a cabo del 1 al 2 de diciembre, en el Auditorium del Colegio de Ingenieros - Cajamarca, de 8.30 a.m. a 6.00 p.m.

B. Organismos Responsables

Los organismos responsables del desarrollo del evento es la Dirección de la Unidad Departamental de Salud de Cajamarca y la Asociación Benéfica Prisma.

C. Participantes

Participarán los profesionales Multidisciplinario de los Centros y Puestos de Salud y Promotores de Salud de la Unidad Departamental de Salud de Cajamarca, y de Instituciones privadas.

1. UTES: Cajamarca, Cajabamba

H.A. Cajamarca	:	5 participantes
Centros y Puestos de Salud	:	20 participantes
Total	:	25 participantes

2. UTES: Servicios Periféricos

Centros y Puestos de Salud	:	40 participantes

3. UTES: Chota - Cutervo - Santa Cruz

H.A. Chota	:	1 participante
Centro de Salud	:	2 participantes
Total	:	3 participantes

4. UTES: Jaén - San Ignacio

Centro de Salud Jaén	:	1 participante
C.S. San Ignacio	:	1 participante
Total	:	2 participantes

5. Comunidad

Asistirán 10 promotores de Salud de la Unidad Departamental de Salud - Cajamarca.

6. Ambitos Administrativos

Asistirá un representante de las siguientes Unidades Departamentales de Salud:

a. Tumbes
b. Piura
c. Lambayeque
d. Cajamarca
e. La Libertad

7. Otras Instituciones

IPSS	:	2 participantes
SFP	:	1 participante
Colegio Médico	:	1 participante
Centro Comunitario Municipal	:	1 participante
UNC	:	1 participante
Proyecto PROESA	:	1 participante
Proyecto Shim Shaullo	:	1 participante
Proyecto PNUMA	:	1 participante
Proyecto EDAC	:	1 participante
Proyecto Jesús	:	1 participante
Proyecto DAS	:	1 participante
Educación	:	2 participantes
TOTAL	:	14 participantes
TOTAL DE PARTICIPANTES	:	**130 participantes**

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PROGRAMA

DIA I: Conceptos y Estrategias

8:30 Inauguración

Dr. Luis Távara Orozco
Vice Minstro de Salud

9:00 La Estrategia de Riesgo en la Atención Materno Infatil

Dra. Delia Haustein

10:30 Café

11:00 Aplicación Práctica de la Estrategia de Riesgo.

Dr. Salvador Baldizón
Dr. Mario Tavera
Dr. Diego Fernández Concha

12:30 Refrigerio

13:30 Trabajo de Grupos

14:30 Café

15:00 Plenario

16:00 Panel: Avances Regionales en la Aplicación de Estrategias de Riesgo en Salud Materno-infantil.

Moderador: Dr. Alfonso Nino Guerrero

Panelistas: Directores de Programas Especiales de la UDES: Tumbes Piura - Lambayeque - Cajamarca - La Libertad.

DIA II: Promotores de Salud

08:30 Panel: Ilusión y Realidad.

Moderador: Dr. Diego Fernández Concha

Panelistas: Promotores UDES-Cajamarca

10:00 Café

10:30 Panel: Promotores de Salud: Motivación y Selección

Moderador: Enf. Zoila Vigo Obando - UDSC.

Panelistas: Enf. Victoria Pesantes P.
Enf. Mª del Carmen Hernández.
Prof. Jorge Velez Quevedo
Dr. Alfonso Nino Guerrero-UDSC.

12:30 Refrigerio

13:30 Promotores de Salud: Capacitación y Evaluación.

Moderador: Enf. Teresa Baltuano

Panelistas: Enf. María del C. Hernández
Enf. Edith Cacho de Terán
Enf. Victoria Pesantes P.
Prof. Jorge Velez Quevedo
Dr. Alfonso Nino Guerrero

15:00 Café

15:30 Trabajo de Grupos

17:00 Plenaria

18:00 Clausura

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Auspician Unidad Departamental de Salud de Cajamarca y Asociación Benéfica Prisma

I SEMINARIO REGIONAL DEL NORTE

Enfoque de Riesgo Para la Atención Materno-Infantil a Nivel de la Comunidad.

Participan: Tumbes
Piura
La Libertad
Lambayeque
Cajamarca

Auditorium del Colegio de Ingenieros

PROGRAMA

Cajamarca, 1 y 2
Diciembre, 1988

ANNEX 9

LIST OF "PUEBLOS JOVENES" IN

PAMPAS DE SAN JUAN - LIMA

ASENTAMIENTOS HUMANOS DE LAS PAMPAS DE SAN JUAN

1. PARAISO
2. 20 DE MAYO
3. IMPERIO
4. 1RO DE JUNIO
5. ALTOS DE MANUEL SCORZA
6. CEDROS DEL SUR
7. VISTA AL MAR
8. BUENOS AIRES
9. LOS PINOS
10. PACIFICO I
11. PACIFICO II
12. FELIPE ALVA Y ALVA
13. SAN MIGUEL DE APURI
14. LOS PORTALES DE SAN JUAN
15. REPUBLICA DEMOCRATICA ALEMANA
16. REPUBLICA FEDERAL ALEMANA
17. MANUEL SCORZA
18. HEROES DE SAN JUAN
19. 13 DE OCTUBRE
20. JAVIER HERAUD
21. TREBOL AZUL
22. LA MERCED
23. UNIVERSO
24. URANMARCA
25. SANTA URSULA
26. RICARDO PALMA
27. JOSE CARLOS MARIATEGUI
28. 24 DE DICIEMBRE
29. ESTRELLA DE SAN JUAN
30. CIUDAD DE BELEN

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ANNEX 10

LIST OF RURAL COMMUNITIES IN THE PROVINCES OF HUALGAYOC AND CHUGUR - CAJAMARCA SIERRA

COMUNIDADES DE CAJAMARCA

1. MORAN ALTO
2. MORAN PATA
3. COLQUIRRUMI
4. MARAYCUCHO
5. MOLINO PAMPA
6. MORAN LIRIO
7. PINGULLO BAJO
8. SAYAPUQUIO
9. CORTADERAS
10. PINGULLO ALTO
11. CERRO MARIA
12. EL DIQUE
13. YERBA SANTA ALTA
14. MINA COLORADA
15. HUALGALLOC URBANO
16. CHULIPAMPA
17. OJOS CORRAL
18. RINCONADA
19. EL TINGO
20. ARPON
21. APAN ALTO
22. CAROLINA
23. BANCO MINERO
24. LAS AGUILAS
25. MESA DE PLATA
26. LA PASTORA
27. YERBA SANTA BAJA
28. VISTA ALEGRE
29. COYMOLACHE
30. PUJUPE
31. MUYA
32. PILANCONES
33. TRANCA DE PUJUPE
34. TUMBACUCHO
35. CORALPAMPA
36. NUEVO SAN JUAN
37. CHAUPIQUINUA
38. COCHADEN
39. TRES LAGUNAS
40. RAMIREZ
41. LA COLPA
42. TACAMACHE
43. LOS MANTOS
44. MANSITA
45. EL MIRADOR
46. CHUGUR URBANO
47. TAMBILLO BAJO
48. PUTIC
49. CAPULI
50. ESCALON

51. CONYUNDE GRANDE
52. COYUNDE PALMA
53. EL CHENCHO
54. PERLAMAYO CAPILLA
55. TAMBILLO ALTO
56. LA PENCA