

PROGRESS REPORT OF
MONTERO HEALTH DELIVERY SYSTEM
BOLIVIA

Report prepared by: B. Brooks Taylor, M.D., M.P.H.

During the Period: July 22 - August 1, 1974

Published by: AMERICAN PUBLIC HEALTH ASSOCIATION

In Agreement with the UNITED STATES AGENCY FOR
INTERNATIONAL DEVELOPMENT

Authorization:

AID/csd 3423
Letters May 2 and 9, 1974

CONSULTANT REPORT

B. Brooks Taylor, MD, MPH
July 22 - August 1, 1974

PART I: Trip Report

PURPOSE OF TRIP : Observe progress of a contractual agreement between the MPSSP and the Iglesia Evangélica Metodista for the administration of medical services in Montero area.

PERSONS INTERVIEWED: Director, Hospital A. G. Reyes, Dr. Julio Vaca; Director, Hospital de Nipios, R. Balderas López; Dr. Fernando Mendoza, Director, Obra Médica Rural; Hna, Nina Fritach, Coordinator, Health Posts (4), Montero; and others.

OBSERVATIONS: DISENGAGEMENT OF FOREIGN INVOLVEMENT IN HEALTH PROGRAMS:

Private institutions, primarily religious, have been permitted to work in health programs, for the poor in Bolivia by the MPSSP and other government agencies (INC, universities) in health. Commonly, a contract between the institution and the Ministry, allows for the provision of services in areas without health services (recognition) or agrees to administration of health facilities by the private institution (binding contract for administration of government facilities).

To the writers knowledge these private institutions have included the following groups: Baptist, Methodist and Catholic churches,

Mennonite Central Committee, German Volunteer Service, US Peace Corps, Salesian Fathers. A conservative estimate is that 20% of rural health services are delivered by such religious groups, perhaps much more.

The Montero Centro de Salud Hospital has been administered by the Bolivian Methodist Church since 1965, with considerable external assistance, especially in capital improvements and equipment. Gradual disengagement in this institutions after foreign direction creased allowed for an evaluation of this program, now entirely run by national personnel.

- (1) Maintenance of financial stability: despite inflationary forces during the year (for example, auxiliary nurses' salaries increased 2 1/2 times, equilibrium was maintained by discharging marginal personnel, a slight increase in fees charged (e.g., medical consult increased from \$b.7.-- to \$b.10.--), and probably through a decrease in general services. Periodic financial and statistical reports are routinely prepared, as these functions were carried on previously by trained personnel. These reports are used to inform MPSSP of activities and occasionally to report to foreign assistance agencies and the IEMB.
- (2) Relations with MPSSP: perhaps because of the history of external support, the MPSSP has been reluctant to assist the CSH in

Montero with items for personnel to the same extent as other facilities. The hospital directors feel, however, that this issue should be stressed, and that increasing Ministry responsibility is both necessary and desirable.

- (3) Community relations: several local health committees (CSP) function to link professional and community interests and to mobilize community support. These organizations have become less active over the past year, partly, due to lack of stimulus from busy medical personnel, and to some measure, from the political-economic situation.
- (4) Internal program relations: the level of medical care, medical and paramedical education, and administrative functions have suffered no decrease. All medical, educational, and administrative personnel performed independently prior to cessation of foreign direction. The high turnover of physicians has been obviated in Montero, this stable staff being responsible for intern training during the past year (UMSS-Cochabamba). However, high turnover of supervisory personnel in associated rural health programs, primarily in graduate nurses, has lead to some discontinuity and instability in primary-level auxiliary workers (health promoters).

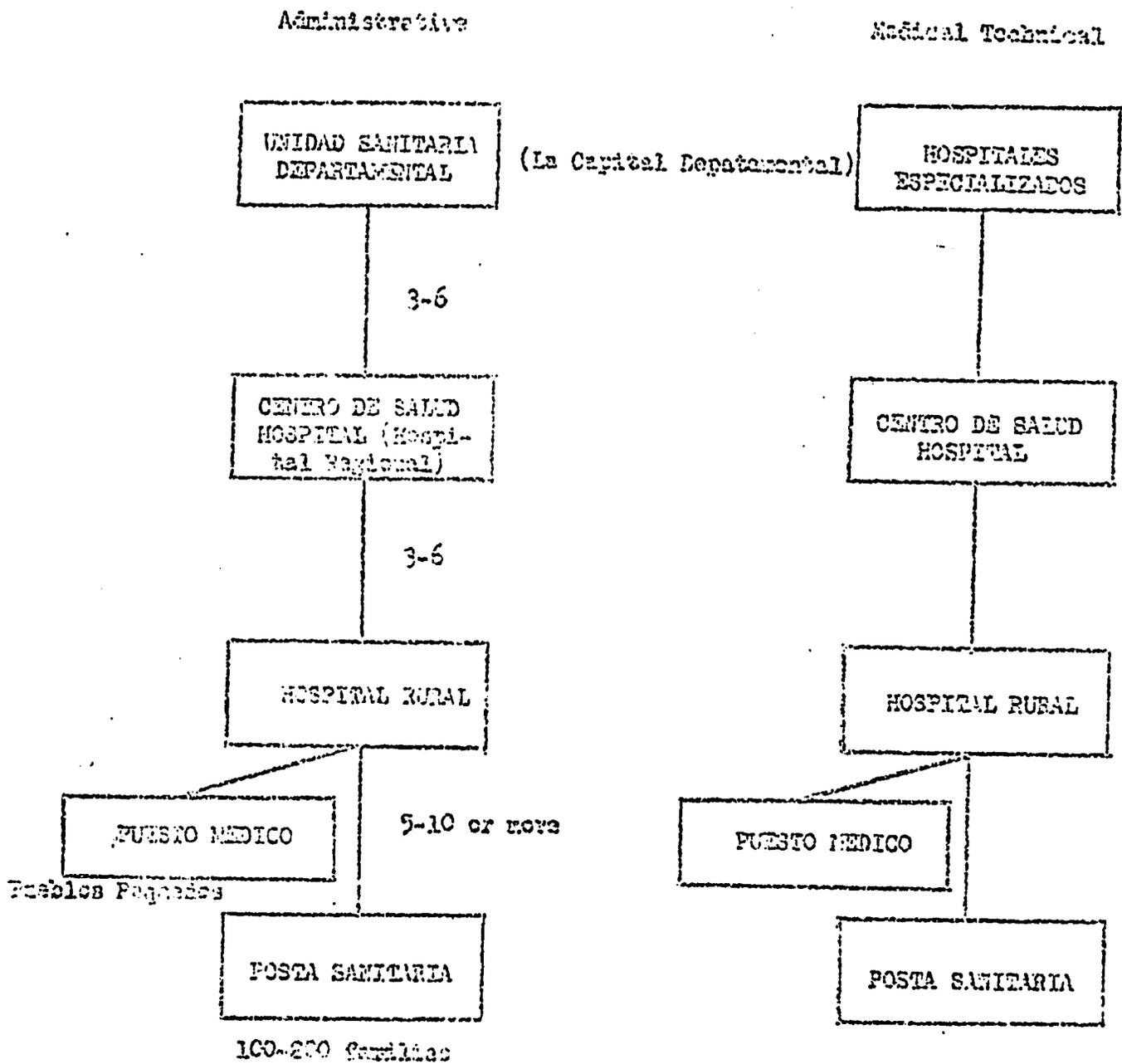
RECOMMENDATIONS:

- (1) A study of private and religious institutions in health is warranted in all planning processes for rural health services

with reference to manpower, investment in construction and equipment, importation of donated drugs, governmental relations.

- (2) Externally financed health projects should include a budget item for training (formal or otherwise) and for observation of similar projects by middlelevel personnel (graduate nurses, administrators) in rural health services. MD's and top level personnel are usually included for training.
- (3) Budget provision or contractual arrangements with foreign institutions should anticipate the possible effects of inflation.

PART II: Rural Health Systems (RHS)



Posta Sanitaria: PH: well-baby (Club de Madres
pre-natal + ? deliveries?
tuberculosis
vaccination campaigns
environmental sanitation: latrines hygiene
health education, nutrition
empirical therapy of common minor illnesses
ancillary: pharmacy, refrigerator (?)

PERSONNEL

Hospital Regional: surgeon, general medicine - 3 or more MD's,
pediatrics dentist - 1 or more
graduate nurse - in-patient (1 or more; environ-
mental
environmental engineer to supervise rural program
MD - or nurse - supervisory to rural PH programs
lab. technicians - one who will supervise rural
services
administration: X-Ray, technician; pharmacist
kitchen, laundry, shofer

Hospital Rural: nurse supervisor (PH) or promotores; environmental
sanitarian supervisor of promotores
1 or 2 MD's (1 permanent, 1 intern or afio de
provincia), dentist or dental hygienist
auxiliaries - (PH) - community outreach

auxiliaries - inpatient

lab tech, pharmacist, administrator

chofer

Posta Sanitaria: promotor de salud (all programs) or promotor
de salud

+

partera (MCH)

Club de Madres?

CERN?

related local institutions

School?

ELEMENTS OF A RURAL AUXILIARY-BASED HEALTH SYSTEM (BOLIVIA)

- 1) local health committees: CPS
 - a) responsible: health post construction and maintenance
 - b) selection + evaluation of promotor
 - c) maintain local funds
 - d) responsible for equipment + drugs at posta
 - e) health promotion (eg. latrines, vaccination), participate in health survey
- 2) selection of health promoters:
 - a) locally selected, education (read spanish); examination of little values but may be interviewed by supervisor
 - b) language: spanish + native tongue
 - c) trained as close to home as possible (no further away than rural hospital)
 - d) strict supervision; probably will be salaried
 - e) preparation of appropriate manual (programatic content)
 - f) male/female: division of duties in case of 2 promotores
- 3) promoter supervision (6-10 promoters per supervisor)
 - a) nurse with appropriate PH training (usually at RHS level)
 - b) environmental health technician with appropriate training
 - c) administration (finances, drugs, equipment)
 - d) intermittent + regular training at central location
 - e) regular visits by a) + b) for program/supervisory purposes (appropriate vehicle)
 - f) specific referral system (patients + problems)

- 4) promoter training:
 - a) simplification of programs (PH)
 - b) evaluation of activities
 - c) health education methods
 - d) simple program statistics
- 5) utilization of health survey for health promotion in community:
 - a) first activity of CPS and health promoter
 - b) nutritional status, recall, heces, blood, etc.
 - c) on basis of survey findings CPS decides
health priorities promoter selected + trained
program(s) initiated
- 6) basic posta equipment:
 - a) balance
 - b) sterilization procedure
 - c) needles, syringes
 - d) examining table
 - e) refrigerator =/- (vaccines)
 - f) clamps, needle holder, suture
 - g) record system - UNDER-FIVES CHART
 - h) bicycle
 - i) lancets, slides (the, malaria)
 - j) capillary tubes
 - k) vaccine carrier
 - l) measuring board
 - m) expendable items (alcohol, hydrogen, peroxide, soap)
 - n) suitable method for transporting slides to rural hospital

7) basic drugs: at health post:

- a) curative and PH programs
- b) low cost; rotating fund arrangement for pharmacy
- c) approximately 20 for empirical treatment (acc. to manual)
- d) standard presentations (perhaps pre-prepared)
- e) vaccines: for routine PH + campaigns
- f) very few if any injectables other than vaccines

8) role of MD:

- a) may be necessary to have biweekly (?) visits to postas for curative medicine
- b) usually better for MD not to be involved in promoter program
- c) traditional in-patient plus PH in rural hospital

9) laboratory support (rural hospital)

- a) PH: the smears, malaria smears, tools?
- b) supplies to postas
- c) hematoerit - well-baby, pre-natal clinics; CBS, urinalysis
Gram stain

10) low cost:

- a) no construction, other than local
- b) preventive medicine emphasized + underwritten
- c) rotating funds for pharmacies (\$50-\$100 maximum)
- d) maximise local participation
- e) charge for all services, except perhaps PH
- f) charity cases, locally determined (Comité Pro-Salud)

- 11) administration (Rural Hospital)
 - a) seek balance between local/rural Hospital accounting (cash, drugs, equipment, supplies)
 - b) training of promoters; evaluation of performance
 - c) equipment, supplies, drugs (regular supervision)
 - d) program evaluation
 - e) statistical summaries
- 12) statistics (collected by promotores), monthly reporting
 - a) mortality by age, sex, probable cause
 - b) morbidity (selected diseases)
 - c) current census of areas (age, sex, language, etc.)

PRACTICAL PROBLEMS IN RURAL HEALTH SYSTEMS

1) ADMINISTRATIVE:

- a) simple administrative procedures: important to keep number of procedures minimal, receive frequent and adequate control from CSH.
- b) lack of trained administrative personnel

2) NURSING:

- a) lack of trained nurses: need for their training prior to supervision of promotores (RN or technical nurse)
- b) high turnover rate

3) PROGRAMS:

- a) insistence on standard procedures
- b) developed on functional lines (roles of nurse, promoter, administrator)

4) PROMOTERS:

- a) voluntarism probably won't work
- b) regular supervision
- c) salaried; will gradually become full-time
- d) must answer question of certification marketable skills

5) HEALTH CARE FOR EMPLOYEES:

- a) should be defined early in program

6) CREDIBILITY:

- a) important to do what one says:
 - meet rural visit appointments
 - provide equipment as promised
- b) active participation of local community (Comite' Pro-Salud)

RECOMMENDATIONS FOR FUTURE RURAL HEALTH SYSTEMS:

- 1) Flexibility: a certain amount of experimentation in RHS is indicated, since Bolivia does not have more than a very few moderately effective and culturally adapted RHS; this implies contact with RHS in other developing countries.
- 2) minimize costs:
- 3) training of middle level technical personnel (in addition to deliverers of primary care); including nurses, environmental health technicians, administrators.
- 4) nation-wide standardization of health manpower categories

- 5) statistical system as an integral part of RHS, to include a program data, b) reporting of certain communicable or nutritional diseases, and c) mortality reporting.
- 6) study of certain technical problems, affecting program content (examples).
 - a) primary drug resistance in pulmonary tuberculosis
 - b) review of maternal (obstetric) complications, from conception to post-partum, including miscarriages.
 - c) development of simple census methods
 - d) treatment of snakebites
 - e) spot serological surveys for Chagas' disease and others.
 - f) study of post-streptococcal diseases (rheumatic fever, glomerulonephritis)
- 7) publication of RHS problem papers (public health, nutrition, infectious diseases, maternal and child health) in appropriate journals or distribution through universities.
- 8) experimentation with dental public health programs (education, dental survey, flouride application, cleaning) utilizing parodontal personnel, and not directly offering curative procedures.
- 9) coordination of various health providers: this has to be done at the ministry level (religious, INÇ, DC, MPSSP, CNSS, Seguro Social Campesino) as a prerequisite for local collaboration.

PART III: SEGURO SOCIAL CAMPESINO

At least since early 1973, the possibility of a Seguro Social Campesino has been mentioned frequently in the national press.

Feasability studies have been conducted by the Instituto Boliviano de Seguro Social; unfortunately these studies are not available for review at the time of this report. Discussions with appropriate officials do allow some comments.

Seguro Social Campesino (SSC) would function as a separate entity or caja under the supervision of IBSS and in coordination with other cajas. In contrast, however, the SSC will offer only medical services for sickness, maternity, and accidents (prestaciones en especie) and will not include old age, disability, or death benefits.

Financing is contemplated through two sources: a) monthly payments by the head of the household of the rural family, at \$b.30.--- monthly, coverage to include, apparently, all permanent members of the household, even persons (farm workers) not related to the family, and b) to a greater or lesser extent, by a tax on farm produce, especially on coca and chicha, and perhaps other agricultural products. In the absence of a patron or employer, no matching funds are to be provided, nor will the government match premiums with the campesino by formula.

The organization of the SSC will be much the same as other cajas; generally at higher service levels contracts will be made with other hospitals (CNSS, MPSSP). At lower levels (postas sanitarias, puestos medicos), the SSC would take over existing

MPSSP rural facilities, using these as a base for more extensive coverage, remodeling and additional construction is contemplated. This transfer has not been approved by the MPSSP and it is unlikely that this would occur without resistance. Primary care, then, would be provided directly by the SSC with its own personnel delivering primary care (preventive and curative); training of physician's assistants and/or curanderos has been suggested. In addition, an administrative structure for collection of premiums and medical fees is anticipated.

Gradually, it is envisioned that the SSC would assume all responsibility for rural and small town populations from MPSSP, INC, and other decentralized agencies.

Programatic areas have already been selected for the first year of operation: Lago, Valle Alto, and Norte Cruceno. In subsequent years, these would be expanded into adjoining provinces and the Department of Tarija. Motives for the selection of these areas are not explicit, but would surely include political considerations. See Appendix.

Even though the SSC has been studied and a plan of action prepared it has not yet received governmental approval.

Comments: Analysis of health financing among the campesinado in Bolivia shows that an average of US\$6 out of an annual family income of US\$300 is spent on health (traditional and modern), amounting 2% of income. This totals \$b.10.---monthly premium

projected fro the SSC (\$b.30.---). Assuming that all monies now spent by the campesino on traditional or modern medicine were transfered to the payment of premiums, an estimated three-fold increase would still be necessary.

Experience from a fairly efficient health program of preventive and curative services with good rural overage -- among a population more receptive to cultural change--showed that the campesino spent on the average \$b.1.---per person-month, or about \$b.6.--to \$b.7.50 per family-month for health. The campesino also contributed his labor and cash for construction of local health posts, but, under present circumstances, this sort of community effort will probably be necessary for any rural program (MPSSP or SSC).

However, in this same health program each local peso was more than matched with outside assistance (INC, religious organizations).

It is not clear whether the government would continue to underwrite a part of the rural health system under SSC.

Another issue raised by SSC is the local support of health programs through SSC this would be in monthly cash payments, but in others, might be through payment for services (private, religious, MPSSP) or in-kind services (Desarrollo de Comunidades).

SSC merits serious study, cautious implementation in pilot areas,

and critical evaluation before acceptance as basis for a rural health policy in Bolivia.

Appendix: map entitled, "SSC: Areas Programaticas"

HSA:BTaylor:rehs 12/8/74