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# TRAINING IN MATERNAL AND CHILD HEALTH, MCH/FAMILY PLANNING FOR FRONT LINE HEALTH WORKERS IN WEST AZARBAIJAN (HEALTH SERVICES DEVELOPMENT RESEARCH PROGRAMME)

by

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## INTRODUCTION

The Health Services Development Research Project is a collaborative venture of the Ministry of Health, the School of Public Health and the Institute of Public Health Research, Teheran University, and the World Health Organization. It has arisen from the need to understand better the problem of health care in Iran, and to discover and test better ways to solve these health problems through an effective and efficient national health delivery system. The programme started in 1971. The first year was occupied by a survey and analysis of the health problems in one particular Ostan, West Azarbaijan. It was decided to implement an integrated health care network at the level of West Azarbaijan Ostan, prior to extending the system to other areas of Iran. The network, which introduced amongst other points new types of front-line health workers, is summarized in the Appendix and will not be discussed in detail in the present paper.

As regards maternal and child health, the observations of 1971 - 72 showed that, in a population of 1,300,000 scattered in 3,300 villages and 12 towns (more than 70% of the population being rural) the problems of mothers and children were inadequately covered. The summary of vital statistics and information obtained showed an estimated birth rate of 37 to 42 per thousand, with an estimated infant mortality of 103 (urban) to 131 (rural) per thousand. The main complaints and diseases were gastro-intestinal disturbances and respiratory diseases.

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An analysis of the health services themselves made it clear that:

1. Health personnel distribution was unbalanced, the majority being concentrated in urban areas. In addition, what personnel existed in rural areas could not usually ensure a continuous service due to very high turn-over of staff.

2. The average number of contacts (essentially for curative action) between population and health services was just over 1/year. Additional contacts for MCH and FP activities was estimated at less than 0.5/person/year for women of child-bearing age and children under five - i.e. 40 per cent of the population.

3. The overall figures in (2) must be taken together with the well-known gradient of utilization according to distance from health units. Even in the most peripheral units*, over 40 per cent of patients came from less than 3 kms away, this proportion rising to 90 per cent for MCH/FP activities.

4 If one considers the areas of individual health care over an extended period (as opposed to episodic personal care), i.e. mainly FP and MCH, coverage of the target population ranged from less than 1 per cent (child care and antenatal care/rural population) to 20 per cent (FP/urban populations).

PROPOSALS FOR ACTION

The existing rural health units in West Azarbaijan consisted of Health Centres serving a population of from 20 to 50 thousand, and staffed by a physician assisted by one or more Behyar (Assistant Nurses) plus supporting staff.

It was suggested that, in villages served from a Health Centre, a set of workers be established at a ratio of approximately one worker to every two thousand inhabitants. These front line health workers would be one female worker (Behvarz), who would deal mainly with the problems of women and children, together with elementary medical care and first aid for complaints of villagers. One of these workers would be provided for a population of approximately 2,000 to 5,000 (4 to 10 villages). This worker would work in and from a simple furnished house, usually sited in the upper storey of an existing village house, and called "Khaneh Behdasht".

A male worker (Behdasht Yar), intended to be more mobile, would collaborate with two Behvarz. The Behdasht Yar would undertake mainly environmental sanitation work, communicable disease control, school health and detection of cases of communicable diseases of major importance. His involvement with MCH and Family Planning would perforce be limited mainly to information and orientation of the women and children towards his female colleague. For this reason, we shall concentrate on the training and development of the Behvarz in MCH and Family Planning.

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* (rural or integrated health centres)

ORGANIZATION OF BEHVARZ TRAINING IN MCH/FP

The criteria for recruitment of Behvarz are:

1. That they be a native of the village where the Khaneh Behdasht is supposed to be established, or at least a native from the immediately adjoining area.

2. That they be proposed by their village (in practice they are often proposed by an influential person in the village).

3. That they be literate, and (for administrative reasons) that they possess at least a Primary Certificate.

4. That they be willing to participate in the programme and return to work in their village or the nearby village.

5. That they be at least 16 years of age.

Recruitment was relatively easy. A pilot programme started in October 1973 and involved six girls in the Chonghoralu area near Rezayieh in West Azarbaijan. In June 1974 three groups of 12 girls each were recruited in Rezayieh, Khoy and Mahabad, i.e.the three main Shahrestans of the district of West Azarbaijan.

RECRUITMENT OF TEACHERS

The Director General of the Ostan Health Services recruited three teams, each consisting of four persons, one sanitary aide, one or two nurses, and two or one Behyar. Some of the nurses/Behyar also had midwifery experience. These teams received a brief introduction to the programme and an introduction to the methodology of training, in particular as regards training objectives. Although some physicians took part in the introductory briefing of instructors, none were included in the training teams per se. This is due to a desire to keep the general training level of the instructors as near as possible to that of their trainees.

It was also decided that training would not be given in one massive block, but would be divided into several blocks of 6 - 8 weeks duration each. The first learning block covered mainly the problems of child health, including care of simple ailments.

At the end of the first learning block, the Behvarz was to be capable of the following in the fields of MCH/FP:

1. Follow up the physical and mental development of children, recognize gross delays in their development and advise the parents, including remedial action at the KB level or referral to the Health Centre.

2. Discuss with mothers the possibilities of modifying child care practices in the cases where the mother and the Behvarz feel that the present practices are not satisfactory.

3. Familiarize women with the concept of Family Planning and advise them on available resources for FP.

4. Managing simple complaints of children according to defined instructions.

The first learning block consisted of conventional face to face teaching and of regular visits to, and work in, existing health centres and in the Khaneh Behdasht of the Chonghoralou field laboratory. After six weeks of training in the training centres, the Behvarz were appointed to newly opened Khaneh Behdasht in three areas, two Behvarz to one KB, for a period of field work under regular

supervision by their tutors. At the time of this presentation, they are undertaking their second learning block, centred mainly on antenatal care and execution of FP programmes (including screening of recipients for distribution of oral contraceptives), and on immunization programmes This second block has been preceded by a field evaluation. This has shown that the trainees have very little difficulty in the correct application of their training to the care of simple ailments and the issuing of standard advice. On the other hand, the concepts and decisions involved in child care as defined under objectives (1) and (2) are much more difficult to present in simple terms, and the trainees obviously had not mastered the necessity for ongoing observation and follow-up of small children, whatever their state of health.

The Ilesha-type weight chart, an adaptation of which has been prepared by one of us (see appendix) has already proved an effective tool in this respect, and its use will be re-emphasized during refresher training.

## PRELIMINARY EVALUATION AND POSSIBLE DEVELOPMENTS IN THE FIELD OF MCH/FP TRAINING FOR HEALTH WORKERS

A study of six months' activity of three Khaneh Behdasht in one area of West Azarbaijan has shown the following extreme ranges of coverage:

- Of approximately 2,000 children under five, 30 to 60 per cent had been checked (in addition to any visits they may have paid for episodes of illness), the average number of visits per child was 1.7 over the 6 months period.
- Of approximately 350 pregnant women, 40 to 70 per cent had undergone at least one visit for antenatal care. (Average number of visits: 1.7)
- Of approximately 900 women eligible for FP, 20 to 40 per cent had started FP (oral contraceptives mainly), the average number of visits over six months was 1.7.

Further studies may show a change in the patterns of use suggested by these figures, but the orders of magnitude are undoubtedly very different from the 1 - 2 per cent utilization rates recorded earlier

## IMPLICATIONS OF THIS PROGRAMME FOR TRAINING OF HEALTH WORKERS

The HSDR West Azarbaijan programme has shown once again that it was possible to have workers on the field after a very short period of training, with early and marked improvement in the access of previously under-served communities to primary health care. Further implications of this programme can be considered at several levels:

1. In the training of large numbers of front line health workers in the field of MCH/FP and their integration in an organized health care network. This is part of the overall programme of HSDR.

2. In the training of professionals other than front line health workers, e.g. midwives, community nurses, medical assistants where relevant, and physicians. The participation of these categories of workers would be a useful two-way exercise, in that both front line health workers and undergraduate trainees could learn and teach to and from each other, and be better aware of each health worker's

contribution to overall health care. A project is under consideration at present whereby university medical students in Azarbaijan would spend two periods of several weeks each working in the project.

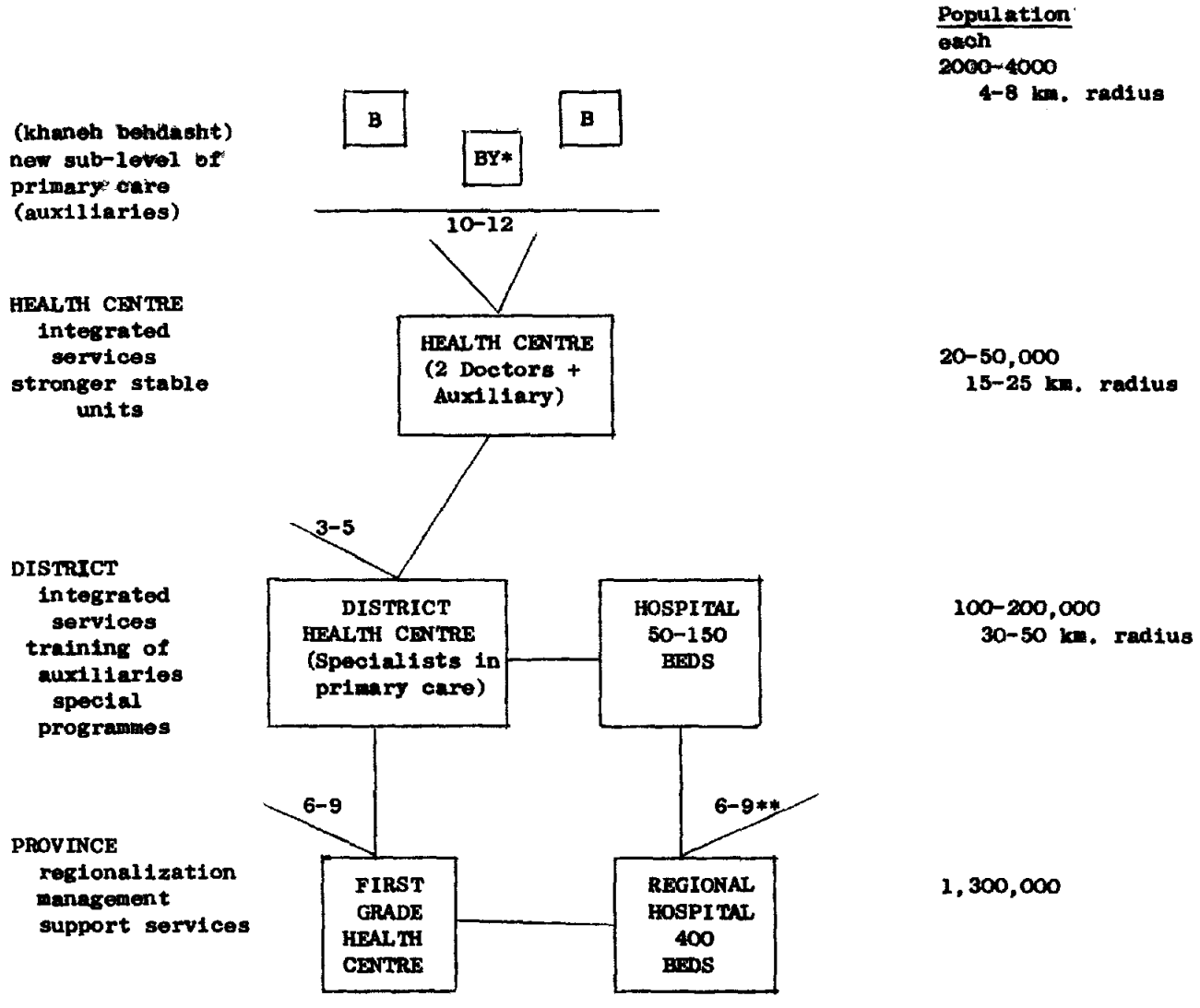
3. Post-Graduate Training

The training and implementation components of the HSDR project in West Azarbaijan should constitute an excellent field of application for post-graduate training in the organization of health care services in general, including child health, immunization, applied demography, etc.

The HSDR project is obviously still a very new project, but one of its main interests lies in the close integration between research in health services development and the early implementation and evaluation of the results of this research

## APPENDIX

### PROPOSED INITIAL FUNCTIONAL AND ORGANIZATIONAL CHANGES IN HEALTH SERVICES, WEST AZARBAIJAN




B - BEHVARZ
BY - BEHDASHT YAR
* 5000-10,000 population
** Proposed regionalization of hospital services