SEMINAR ON DEVELOPMENT OF FIELD TRAINING AREAS THEIR NEEDS AND ADVANTAGES FOR THE TEACHING OF MCH AND FAMILY PLANNING TO HEALTH PERSONNEL

Isfahan, 25 - 30 MAY 1975

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REGIONAL SEMINAR ON

DEVELOPMENT OF FIELD TRAINING AREAS, THEIR NEEDS AND ADVANTAGES FOR THE TEACHING OF MATERNAL AND CHILD HEALTH AND FAMILY PLANNING TO HEALTH PERSONNEL

Isfahan, 25 - 30 May 1975

R E P O R T

The views expressed in this Report do not necessarily reflect the official policy of the World Health Organization.

This document has been prepared by the WHO Regional Office for the Eastern Mediterranean for Governments of Member States in the Region and for those who participated in the Seminar.

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I INTRODUCTION

1. The regional seminar on the Development of Field Training Areas in support of the teaching of maternal and child health and family planning to health personnel was jointly sponsored by the Government of Iran and the Regional Office for the Eastern Mediterranean of the World Health Organization, and was hosted by the University of Isfahan at its campus from 25 to 30 May 1975.

2. The seminar was inaugurated at the Pahlavi Hall of the University of Isfahan under the chairmanship of H.E. Mr Akbar Zad, Governor General of the Province of Isfahan, who graciously delivered the inaugural address (Annex V). He welcomed the participants to the city of Isfahan and the meeting, assured them that the theme of the seminar was of utmost importance and that practical suggestions for related problems were expected.

3. The programme of the inaugurative session was announced by Dr M. Sarram, Director Population Studies Centre, Isfahan University, who also welcomed the participants.

4. A message of welcome from H.E. Professor A. Pouyan, Minister of Health, was then conveyed by H.E. Dr A.M. Sardari, Under-Secretary of State for Population and Family Planning, who, after adding his welcome, read his own address highlighting Iran's needs and experiences in the area of the seminar's subject (Annex VI). Dr Sardari hoped that the seminar would establish some clear conclusions and detailed recommendations.

5. The message of Dr A.H. Taba, WHO Director for the Eastern Mediterranean Region was then read by Dr A. Robertson[1] (Annex VII). Dr Taba emphasized the importance of the meeting and its wider implications in helping students and faculties to achieve a balanced outlook on social needs and the objectives of the health care system as a whole. Dr Taba drew attention to the need for field training areas to serve as wide windows on the community, in order to help keep classroom and bedside teaching in proper perspective and on the right course.

6. An address of welcome was then read by Professor A.M. Behbehani, Vice-Chancellor for Research, on behalf of the University of Isfahan and of H.E. Dr Motamedi, The Chancellor, who was on official travel abroad (Annex VIII). Dr Behbahani thanked WHO and the Regional Director, Dr Taba, for co-sponsoring the seminar and holding it at the University of Isfahan.

7. The subject of the meeting was then briefly introduced by Dr S.A. Zafir[2], Secretary of the Seminar. Its high degree of need and relevance was obvious as less than 10 per cent of the medical schools in the Region had so far used the approach of establishing and developing field training areas in relation to the professional training of medical students. He reiterated the appreciation and thanks of Dr Taba to the Government of Iran and the University of Isfahan for holding the seminar, and conveyed his thanks and the appreciation of the participants from Egypt, Pakistan, Sudan and Syria, at having the opportunity of visiting the historic city of Isfahan and its young and vigorous university.

8. After the inaugural session, the meeting reassembled in the seminar hall of the University. The following were elected as office bearers of the meeting:

Dr M. Sarram (Iran) - Chairman
Dr N.H.A. Khan (Pakistan) - Vice-Chairman
Dr M.R. Anbari (Syria) - Vice-Chairman
Dr L.M. Kamel (Egypt) - Rapporteur
Dr M.I.A. Omer (Sudan) - Co-Rapporteur

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[1] Public Health Administrator for Health Manpower Development, WHO, EMRO, Alexandria

[2] Regional Adviser, Family Health, WHO, EMRO, Alexandria

The provisional agenda of the meeting was adopted without modification. The provisional programme was slightly changed to permit one full day's field visit to Najafabad Shehrestan on the second day and none on the fourth, this time to be utilized in group discussions; some small changes in timings of plenary sessions and group discussions were accommodated as required.

II OBJECTIVES OF SEMINAR AND PLANS

The objectives of the meeting were described briefly by Dr Zafir, in terms of immediate objectives of the deliberations, including behavioural objectives of the participants, and the ultimate objectives resulting from the meeting (Annex IX).

1. Long-term objectives

The ultimate objective, through the establishment of field training areas (FTAs) in support of medical schools and other health professional institutions, is to help improve the community orientation of members of health team and the co-ordination between them so as to provide balanced preventive, curative and promotional health care services to the community.

2. Immediate objectives

The following were the immediate objectives of the meeting:

(a) to provide the participants with an opportunity to exchange views and experiences, and to discuss the needs and advantages of FTHs for the teaching of population dynamics, MCH, family planning and related subjects to medical and other health professional students;

(b) to establish recommendations for developing field training areas for the teaching of population dynamics, MCH and family planning and the teaching of community aspects of medicine generally.

3. Behavioural objective

It was intended that after participating in the meeting, the participants would assess the need for developing FTAs in support of the teaching and learning process of students, and outline plans for establishing FTAs in situations with which they are most familiar,i.e. their own countries and/or institutions.

4. Plans for the meeting

The meeting was planned as both a seminar with presentations and discussions during the first half, and a brief workshop mainly in the last two or three days consisting of small group discussions, when individual participants could summarize and outline their thoughts, and after discussion arrive at agreed joint group conclusions. The views and suggestions of these sub-groups would be presented to the whole group for discussion leading to the meeting's report and recommendations.

5. Group discussions - Group size and membership

The participants agreed that small groups (preferably not much larger than five persons each) for detailed discussions be constituted by countries with one or two WHO consultants/ advisers or other participants/observers as resource persons. Guidelines for these groups were distributed in advance to all participants (Annex X). The group discussions were to focus on needs of countries and institutions from which the participants came, and in most groups there was a reasonable complementarity of faculty disciplines.

However, there was not enough time for the groups to address themselves to all points in the guidelines.

The reports of the groups from Egypt, Iran, Pakistan, Sudan and Syria provide very useful proposals for consideration and implementation in the respective countries (Annexes XVI - XX).

6. Field visit

On the second day a field-visit was arranged for all participants to Najafabad township and three neighbouring villages, Galaa Safid, Galaa Shah and Khorasan, by courtesy of the provincial health department (Dr M. Loghmani, Deputy Director General, Health Department, Isfahan Ostan, himself a participant, was the main organizer) and with the co-operation of the Najafabad Shahrestan Health Department. The participants divided into several small groups, each accompanied by an Iranian colleague to interpret during house-visits to families selected on-the-spot. The families' co-operation, mostly women being present in the houses, was spontaneous and of a high degree. The visiting groups had been briefed and given a list (Annex XII) of questions which could be expended according to the needs and objectives of the surveys. A report of findings was later distributed and discussed in a plenary session.

The main purposes of the field-visit were to introduce the atmosphere of the field to the meeting, and to demonstrate to participants the ease and simplicity, albeit with some planning and due regard to the convenience and people's feelings, with which contact could be established with communities and information gathered to solve problems and improve services. In these respects the field-visit was very rewarding

Another aim was to review some local, national and international experiences with regard to health related family planning services. Three presentations were given and discussed in the Najafabad health centre: first an information and communication in support of family planning, presented by Dr M. Loghmani and Mr R. Gillespie of the Population Council, the second by Dr G.A. Leilabadi, Director General of Health, Ostan of West Azerbaijan and Dr M.C. Thuriaux, WHO Medical Officer, was related to the Health Services Development Research project; and the third by Dr G. Zatuchni of the Population Council briefly described and discussed the evolution of an internationally organized post-partum family planning programme to the comprehensive MCH-based family planning which is now being field tested in several areas of the three main developing continents.

III BACKGROUND STATUS OF FTAs IN MEDICAL SCHOOLS

There are some fifty-six medical schools in the WHO Eastern Mediterranean Region. That less than 10 per cent of these schools have FTAs was seen from responses to a brief questionnaire sent to the participants well before the meeting (Annex XI). The majority of the medical schools have field training visits but fully functioning FTAs still need to be developed partly because some medical schools in the Region tend to be rigid and especially resistant to change. Medical schools carry on traditional patterns and are hesitant to introduce recent worldwide accepted advances in medical education, perhaps because of a sense of insecurity and in order to get recognition.

1. Influence of the status of departments of community medicine on FTAs

FTAs in medical schools are usually attached to a department of community medicine. This raises the question of whether the inferior status of community medicine as a discipline in the Region is responsible for the poor progress in establishing FTAs. Some possible explanations for the low status of community medicine, that were considered were:

1.1 The greatest difficulty is that the health system care is often contrary to a community emphasis because it is controlled by elitist clinicians with a purely institutional orientation.

1.2 Health conditions in developing countries produce heavy morbidity and a tremendous demand for curative medicine and symptomatic relief. The public therefore also tends to emphasize curative rather than preventive medicine.

1.3 Entry to medical schools often is not related to a sincere desire to practice medicine, but rather to economic and material expectations on the part of the future physician. Altruistic motivation in medicine is especially difficult to maintain because this profession provides the best opportunity for upward mobility of any occupational opportunity.

1.4 The student tends not to be attracted to community medicine because he compares the status of the professor of community medicine with professors from clinical fields who have more glamour and a higher income.

1.5 Students share the general idea that a successful career as a practising physician depends only on treating individual patients.

1.6 Students feel that community medicine does not offer sufficient challenge to their intellectual abilities.

1.7 Faculty in departments of community medicine tend to receive minimum co-operation when co-ordinating teaching schedules with other departments. Because of competition for the time of students it is especially difficult to introduce innovative methods based on the use of FTAs because this requires blocks of time away from the campus.

2. Enhancing the status of community medicine

To compensate for their continuing lack of acceptance the following suggestions well-considered to make community medicine more attractive are worthy of careful attention and implementation:

2.1 To co-operate and not compete with other clinical departments.

2.2 To emphasize education in modern epidemiology and use opportunities for epidemiological research to show clinicians the potentials and challenge of community involvement.

2.3 To include general practice opportunities in the programme of community medicine as a natural means of demonstrating clinical involvement in integrated comprehensive care.

2.4 To emphasize preventive measures for individuals and families rather than just focussing on community measures.

2.5 To reduce the teaching of hygiene and sanitary engineering, since medical students tend to view these activities as being extraneous to the doctor's job.

2.6 The point was mentioned that medical students are exposed to community medicine and field training late in their medical curriculum, whereas experience in many places shows that it is much better to introduce community medicine at the beginning and have progressive and sequential development of community experience in each year of the medical course, including the internship year.

IV OBJECTIVES FOR THE DEVELOPMENT OF FTAs

Field training areas (FTAs) should be developed with the broad goal of providing community-based facilities and services to be used by educational institutions for teaching, research and service. This involves a series of more specific objectives which are presented here from the perspective of students, teachers, health services, and the community being served. It is important to keep a balance between these objectives; though none of them are competing, they do require co-ordination.

1. Student-oriented objectives

From the students'point of view field training areas may be used:

(a) To provide students in medical schools and other health training institutions with a knowledge of community health problems, to develop skills in making a community diagnosis and to promote a community perspective, which requires an awareness and appreciation of the satisfaction of working with communities and families as well as with individuals.

(b) To develop understanding of the special problems of rural people, skills in providing rural services, and attitudes favourable to working with underserved populations.

(c) Because of the great importance of MCH and family planning in the countries of this Region, to provide practical opportunities for learning how to study the problems of women and children and apply effective measures based on deep understanding of home conditions.

(d) To demonstrate the integration of community health with other disciplines which contribute to development such as social sciences, agriculture, education, etc.

(e) To give practical experience in comprehensive care by combining curative and preventive services as they are made available in the home, health centre or hospital by appropriate categories of personnel and with continuity in time.

(f) To provide opportunities for students preparing for all categories of workers in the health team to have opportunities to work together to learn how a team functions and the role and relationships of all team members.

(g) To bridge the present gap between education in tertiary care hospitals and the usual working situations in health services facilities, by providing in-depth experience under conditions that approximate future working conditions, but to show also how these typical situations can be improved.

(h) To structure the field work so that students actively participate in community studies and in providing services with the particular objective of learning practical approaches to problem-solving.

2. Teacher objectives

From the teachers' point of view the field training areas may be used:

(a) To produce a marked shift in teaching methods in keeping with the general pedagogic principle that learning through participation gives much better results than any didactic methods, even with the use of audio-visual and other special aids.

(b) To provide unique research opportunities for all members of the faculty by providing a base for data collection at minimum cost to the investigator and little or no trouble to the community; the range of possible research to include:

(i) descriptive epidemiological studies to define the incidence and prevalence of local health problems especially relating to nutrition, child growth and development, health problems of women and the results of hyperfertility,

(ii) analytical epidemiological studies to elucidate causation,

(iii) socio-demographic and ecological studies of community characteristics,

(iv) operational studies of utilization and the relative effectiveness of various health measures, especially those related to MCH and family planning.

(c) To provide a framework for a community orientation among teachers from other medical and health disciplines through their participation in research, service and teaching.

3. Health services objectives

From the point of view of the providers of health services, field training areas may be used:

(a) to ensure that health personnel have a practical orientation to the provision of health care in the context of local conditions,

(b) to provide a sound basis for the analysis and monitoring of local health problems, especially those affecting women and children,

(c) to work out new approaches to health care and practical means for testing innovative programmes before general implementation in national or local programmes, with particular attention to MCH and family planning.

4. Community objectives

From the point of view of the community being served, field training areas may be used:

(a) to ensure the provision of good quality care which should enhance the health status of the people, so as to make it worth their while to co-operate in training and research activities,

(b) to develop greater capacity in families and the community to look after their own health problems especially as they relate to MCH and family planning.

V CRITERIA FOR THE SELECTION OF FTAs

1. General considerations

(a) The criteria for the selection of FTAs are directly related to the defined objectives. Since there is much evidence that learning through personal experience and participation is the most effective educational approach, judicious involvement of the learner (health trainee) in community health service activities is essential and should start early.

(b) In medical schools the involvement of clinical departments in the activities of an FTA is essential, although difficult, but good co-operation can be achieved by joint research and involvement in-service activities relating mostly to common diseases and simplified approaches.

(c) The questions of distance, accessibility, size of population and related physical criteria must be decided in accordance with local requirements. Experience shows that a reasonable range within these characteristics is needed for flexibility. Rather than being highly specific therefore some general principles are presented:

(i) The distance should not appear too great to faculty and students and this will depend largely on such issues as the availability of transport, student and faculty time and a balance between hardship and convenience.

(ii) The population should not be so small as to become quickly over-saturated with student contacts, nor so large as not to be amenable to a good quality data-base.

(d) Much of the discussion revolved around the "quality" of the FTA services - should it be <u>any</u> area into which the students could be thrown to get the experience of real-life constraints, or should it be a <u>special</u> area with adequate facilities and personnel, or at least better than average for the country.

(i) While an FTA of average quality is relatively easy to set up and has the advantage of providing students with a taste of real-life situations, the hazard of producing too strong a negative reaction and turning off student interest should not be overlooked.

(ii) Poor living conditions (for students and faculty) in an FTA are not conducive to a good learning experience.

(iii) For long-term effectiveness, it is desirable to select an area which can be progressively improved, thus demonstrating the incremental impact of health measures.

(iv) Graded experiences for students with services at various quality levels within an FTA might range from working in FTAs with sparse facilities to more idealized arrangements so as to provide exposure to all types of conditions.

(v) Thereshould be co-operation between the health teaching institution and local health services with both contributing to the delivery of health care and to the learning experience.

(e) Disaster relief can be arranged in almost all countries at one time or another (e.g. floods, earthquakes, cyclones, etc.). These provide a particularly good opportunity for students to gain field experience, especially if they are accompanied and supported by the family members. Such rather unusual opportunities of extreme exposure mostly give a feeling of considerable satisfaction and accomplishment, although these are generally short-lived experiences. Of course, such relief activities are no substitutes for continuing experience provided by FTAs.

2. <u>Specific criteria for selection and development of FTAs</u>

(a) The primary requirement is provision for the continued maintenance of a high level of acceptability and satisfaction in the community, the health service system, the teaching faculty and the students.

(b) The quality of existing services should be at a level which will provide a good learning experience in the context of local services now and the regional potential of

developing good health services in the future. This means that students should work in situations which show what can reasonably be accomplished within the range of local resources and manpower and also that they should be exposed to current real-life situations. In any case, the FTA should provide an environment which is similar to the students' eventual work expectations. Living conditions in FTAs should not be so deficient as to discourage students from further interest in rural services.

(c) Distance/accessibility, size and characteristics of population, social and economic conditions, the distribution of health problems and the rural/urban balance should be representative of the region. Arrangements should promote good supervision while students are learning through practice to carry out a full range of MCH and family planning activities.

(d) Support of and linkage with secondary and tertiary levels of health services should be available through a good referral system.

(e) Supervision by the staff from various clinical departments in addition to overall direction provided by the department of community medicine should be combined to provide a comprehensive community approach. If students are expected to reside in the field then their supervisors should also do so.

(f) The staff-student ratio should be balanced so as to encourage self-directed learning and to provide support by faculty members when students need it and turn to them for help.

(g) Team work experience should be built into routine activities so that all members of the health team become aware of the roles and responsibilities of others. This should combine sufficient exposure to activities which are part of the responsibility of each type of personnel, so that they can really develop competence, and also some exposure to activities of other team members to ensure understanding and co-operation.

(h) The FTA should provide exposure to locally unique or important cultural and religious characteristics of the population. This should lead to understanding of ways in which health services can be provided to accommodate such issues as the changing role of women.

(i) The primary criterion for choice of faculty is that they must have had in-depth field experience themselves in order to communicate understanding about communities to their students. For faculty members who do not have such a background, the FTA should provide opportunity to gain such experience on a rotational basis.

VI SUPPORT AND UTILIZATION OF FTAs

The background papers in the annexes provide systematic consideration of some relevant issues. The real problem is implementation and this can be crystallized by taking some specific questions that have arisen during efforts to develop FTAs.

1. Questions from the students' perspectives

Q.1 What is the best staging or phasing of FTA programmes to meet objectives?

A.1 The basic principle is that student time in the FTA is extremely precious teaching time; therefore, it should be used only for activities that cannot be carried out elsewhere. Anything that can be done in the hospital or classrooms should not take up time in the FTA.

A.2 Start contact with FTA early in the students' professional education, from the first year if possible, and extend it right through until the internship training. This should be done by using field visits early in medical or health training to begin to introduce attitude changes to overcome the cultural shock of first exposure to the villages while students are still idealistic. It is also the best time for learning basic skills of community service. Then, towards the end of the medical or health course, an in-depth, prolonged residential experience in the FTA is essential to get real understanding and opportunities for field practice of management of the health team in a total care system.

Q.2 How can functional analysis and role definition be related to FTA use?

A. No progress can be made in developing proper team relationships until the roles of each member are clearly defined. There are now good and simple scientific techniques for carrying out functional analysis. Job analysis then leads to direct application in educational planning. The balance of time allocated to specific functions in the FTA experience should be directly derived from this job analysis and from clearly stated objectives. The following grid was developed to relate a set of objectives to a varying definition of emphasis (ranging from + to ++++) required for orientation of the various members of the health team, in accordance with their expected and actually observed roles. This method will permit semi-quantitative determination of the amount of teaching/learning experience needed and represents a modified Delphi approach to priority setting. The example was taken from the Iranian sub-group's statement of objectives.

Grid

FTA use

Objectives	Behvarz	Behdashtyar	Nurse	Med.Doctors
1. Understand problems of community	+	+	Imp. ++	V. important objective ++++
2. Provide means for fertility regulation.	++++	+	++	++++

Q.3 The concern is frequently expressed, will students learn wrong information and techniques from auxiliaries?

A. If job descriptions are properly prepared before-hand for all levels of workers, including the auxiliaries, and kept up-to-date on the basis of actual performance, the relationships will be established in an organized manner and any apprehensions will be seen to be ill-founded. In fact auxiliaries in a well-organized system can be especially effective teachers of professionals who normally rank higher in the formal heirarchy.

Q.4 What is meant by: "The doctor is leader of the health team"?

A. A leader should be humble and gentle and well aware of the roles of all team members, and the problems they face. Such awareness will bring recognition of the fact that routine activities can be done better by specially trained auxiliaries than by the doctor. This includes routine primary medical care and screening of cases for referral. The best leadership is by example and by non-formal educational support to raise constantly the quality of work of all members of the health team.

Q.5 What is the definition of good quality?

A. Good quality care in community terms means the best possible care for all, rather than excellent care for the few or the elite. This is totally contrary to usual medical thinking, especially in medical schools where excellence tends to become the enemy of the good. Good quality is not to be found in super-specialization, high technocracy and consequent impersonalization, elaborate hospital buildings and expensive equipment, or dramatic feats of last stage curative heroics, but by restoring a sense of concern for total health care for the common man. The community doctor must learn to make difficult decisions in allocating resources in accordance with principles of social equity. If doctors do not take the leadership in meeting demands for social justice in medical care unpalatable controls are sure to be imposed by society.

Q.6 What is the right balance of supervision?

A.1 Field supervisors should all have had adequate previous field experience.

A.2 Supervisors should be available in the field when help is needed by students. More supervision will be needed during early exposure to the FTA than later when students are taking more responsibilities.

A.3 Supervisors should be open and gentle in welcoming requests for help but this does not mean spoon-feeding since students should also be given independence.

A.4 Supervisory support should never mean taking away the usual role or responsibility from any category of worker. For instance, doctors should not automatically take over when they visit an auxiliary in the field and in each situation he should respond only if expressly requested by the auxiliary or if it seems expedient for some emergency need. The basic dictum is that the status and confidence of the auxiliary should be higher after a supervisory visit than before. Therefore, supervisors need to devote special effort to developing these qualities.

A.5 Good supervision is always primarily an educational effort.

Q.7 What are appropriate facilities for an FTA?

A.1 For residences for students and faculty, village housing can be improved quite cheaply, to be adequate and acceptable. New urban type of structures should be avoided at all costs, as they set the FTA personnel apart from the community and tend to bind the teaching institution unduly to an area which later may become unpracticable.

A.2 Drugs and equipment should be simple and of direct relevance. This should not become an area for money-saving. The list of drugs and equipment should be prepared in the FTA by persons with field experience and not initially by the faculty in the campus or hospital.

Questions from the faculty's perspectives

Q.1 How much field experience should faculty members have?

A.1 Clinicians drawn into field work should be given the opportunity to develop in-depth understanding of community problems. It is even more important to develop a process by which those working in the field already who are particularly effective will be drawn into teaching positions. This means that the most effective teachers already working for health services would be given faculty positions outside the usual appointment regulations.

A.2 Faculty appointments should go to individuals who genuinely like people and therefore can understand the problems of needy people, especially those from rural areas.

A.3 Teaching in the field especially requires an understanding of health team and supervisory relationships.

A.4 Community health departments should make use of part-time people through joint appointments with other faculties and with the health services.

Q.2 What is an appropriate inter-disciplinary balance in the teaching faculty for FTAs?

A.1 It is essential to have a co-ordination department, such as the community health department, which stimulates the involvement of other departments and provides for coverage of community aspects of health care as well as comprehensive care for individuals. Some clinical departments can also occasionally be prime movers in organizing the FTA (e.g.paediatrics).

A.2 In programme implementation it is essential to get maximum involvement of faculty members from other clinical departments and related disciplines. This is necessary to get student recognition of the multidisciplinary nature of comprehensive community care and also to make the work respectable, especially for clinically oriented students.

A.3 The faculty members who do become involved will find stimulating opportunities for research and service in addition to making a profound teaching contribution.

Q.3 How much participation of faculty should there be in the FTA?

A. If faculty members, especially department chairmen, are unwilling to live and work in the village, the whole activity will continue to be unpopular and have a low status. It is essential that the faculty provide leadership in the sense of going first to the village to show that the problems can be solved.

Q.4 How can the faculty ensure enthusiasm?

A.1 Enthusiastic faculty members will produce enthusiasm in students - or at worst tolerance by the least interested students.

A.2 Good team work provides a good learning environment.

Q.5 How can large groups of students be handled most efficiently?

A.1 The possibility of using carefully selected student leaders in an appropriate ratio with other students represents a tremendous unused resource.

A.2 Self-directed learning should be promoted, including the development of programmed instruction on special subjects such as statistics and epidemiology.

A.3 More precise objective-setting so students and faculty know precisely what they should be doing is an obvious matter that is often ignored.

A.4 There is a tremendous available resource in the possibility of using some leadership from the community. It has been clearly shown that in some FTAs community leaders take great pride in participating in teaching on a continuing basis and become particularly effective in their ability to communicate reality.

A.5 The use of paramedical and auxiliary health workers to teach medical students as well as students in all of the health professions represents a logical extension of the basic concept of team work.

A.6 Finally, there should be wide recruitment of part-time teachers from all departments of the institution for field rotation.

3. Questions from the community's perspectives

Q.1 How can community saturation and fatigue be minimized?

A.1 The community should be involved in all stages of the work so that they become proud of their role as hosts to an important educational activity.

A.2 Periodic meetings with village elders should be held to discuss plans and problems. It is important to give the village leaders credit when government officials come from outside and in all publicity and publications.

A.3 Even after an FTA has progressed substantially it can continue to be used as a demonstration of how an ideal field programme should be run while an average area nearby can be started to extend the activities into an area with more challenge.

A.4 It is especially important to handle crises in community relationships very carefully, and especially to guard against and be alert for rumours which should mobilize as much control effort as any epidemic.

Q.2 What can the community contribute?

A.1 The opportunity should be offered to the community to contribute almost anything within its capability. This may include housing or clinic facilities, food for a feeding centre, payment for drugs and many other direct contributions. In this process community satisfaction and a sense of pride in hosting the FTA should be maintained.

4. Questions about the data base

Q.1 What are the uses of field data?

A.1 To help the community in its micro-planning of its own health services.

A.2 Routinely collected information regarding the community is like routine clinical data, such as temperature and pulse which helps to monitor the condition of a patient. It provides a basis for judging changes in health status which are important in good teaching.

A.3 Aggregation of information provides broad epidemiological appraisal of health status and understanding of causal relationships.

A.4 Continuing data collection or repeated surveys give the best bases for evaluating the effect of programmes.

Q.2 What sources and kinds of data should be collected in FTAs?

A.1 Data should be streamlined and kept to a minimum.

A.2 Routine community data should start with basic vital statistics covering births and deaths and causes of illness.

A.3 Clinical data should be collected from all units providing health care to get information on morbidity and mortality.

A.4 Data should be identifiable and cross-referrable in terms of identifying individuals and families.

A.5 Special survey and research data collection should be self-limited and not go on indefinitely.

A.6 Well-planned longitudinal studies data can be collected for long periods if well planned, monitored and used.

Q.3 What constraints are there on data collection?

A.1 The greatest constraint is the lack of good ideas and initiative.

A.2 Associated with that is the difficulty of transmitting and getting acceptance of ideas.

A.3 Funds.

Q.4 What controls should be applied?

A.1 It is essential to maintain a tight control on unnecessary data collection which does not have precise use or objectives, since there seems to be an inevitable tendency to merely accumulate information. A limited amount of good quality information is much more useful than large amounts of poor data which can be terribly misleading and therefore dangerous.

Q.5 How can provision be made for data for special research?

A.1 A general data base makes for a very efficient arrangement for special studies, especially in epidemiological studies and health services research.

A.2 Exchange of ideas with colleagues is often dependent on quantitative data. This is especially important in the highly desirable communication that should be promoted between academic and service personnel.

Q.6 How do you provide for teaching and evaluation?

A. These activities should be built into the objectives of routine collection of information. To make community teaching scientific it is necessary to have quantitative data, similarly evaluation depends on measuring change.

5. Questions relating to attitude change

Q.1 How do attitudes of health personnel change?

A.1 Role models are most important (e.g. medical students follow the example of their professors, especially the clinical professors).

A.2 Some supervision is needed to provide a minimum discipline base in the building of professional habits.

A.3 The gratification response which comes from the performance of good work which is appreciated by the people served is a very important motivating force for doctors. This is obviously one reason for the natural tendency to emphasize clinical work because sick patients tend to be more grateful than normal people who are kept healthy.

A.4 Attitudes are supported or modified by rational thought, a presumably intellectual process of understanding and explaining which can perhaps be better transmitted in an academic environment than any other means of attitude change.

A.5 Social pressure is a powerful force in attitude change. It is particularly influenced by peer pressure within student groups and also by the response of the community which is being served.

A.6 Administrative regulatory pressures can be strong in developing habits of behaviour and this applies especially to administrative recognition, appreciation, rewards, incentives and a whole armamentarium of punitive measures.

A.7 A skilled teacher learns to use frustration among students carefully. This powerful force gets directly into the process of value change. Teaching at the cognitive levels only has minimal lasting effect and one of the characteristics of exposure to community need is that students get impatient and frustrated. The energy generated should be carefully channelled to promote continuing motivation.

Q.2 What is wrong with the present values of health personnel?

A. Most health personnel fall too easily into patterns of elitism and selfishness rather than fine dedication to service. Health services are structured to suit the convenience of providers rather than the public. A frequent problem is to minimize the exploitation of ill health for private gain or status by publications.

Q.3 What are the most useful practical means of summarizing the use of FTAs for attitude change

A. The FTA provides an ideal opportunity for graded doses of exposure to situations which will in themselves produce attitude change. The opportunity is to set up a whole environment in which the proper values underlying community care can be demonstrated and encouraged rather than expecting students to pick up these values on their own.

Q.4 How much frustration can students stand?

A. Appropriate instructors must always be present when students are in the field. They should be sensitive to the common occurrence of frustration among students exposed to the extreme needs of rural communities. They should be able to provide moral support and suggest practical measures for doing something about the seemingly hopeless problems encountered. Although some feeling of frustration is frequently useful since it involves the affective level of learning, it must be watched and attended to carefully, and suitably channelled and utilized.

VII CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

1.1 The Seminar concluded that higher priority and more specific orientation needs to be given in the health training institutions of the Region, including the medical schools, to the teaching of community aspects of medicine, and especially to the teaching of MCH and family planning.

1.2 The Seminar further concluded that for effective teaching of these subjects, it is essential to develop appropriate field training areas (FTAs), carefully selected, in order to provide adequate learning opportunities to students.

2. Recommendations

2.1 To universities, medical schools and other institutions teaching health personnel

2.1.1 The Seminar recommends that increased priority be given to the teaching of the multiple aspects of community medicine, in all health training institutions of the Region, specially medical schools.

2.1.2 A revision of the curricula of medical schools and other educational institutions is urgently needed to provide a new community orientation with special priority to the needs of MCH and family planning. This should be based on careful definition of the objectives

of the educational process which should start with a functional analysis specifying the roles and responsibilities of each member of the health team. This may require significant changes in the regulations of national regulatory councils controlling the educational institutions. In developing the new curriculum changes there should be phased introduction of the basic sciences of community medicine and then the applied community sciences.

2.1.3 It is recommended that all training institutions give top priority to establishing a sound organizational base for the development of FTAs by providing the necessary support and facilities, arranging for and ensuring allocation of student time, and appointing properly oriented staff, including clinical teachers in medical schools. Moreover, the work of students in FTAs should not be confined to health centres, but should be extended to families in their houses. These aspects are important to ensure proper moulding during the formative period of the students.

2.1.4 Because a community orientation to the massive needs of rural areas, especially for MCH and family planning, requires continuity and careful staging of the educational sequence, it is recommended that learning experiences in the FTA start from the first year and extend throughout the training period.

2.1.5 Educational institutions should take the initiative in approaching official health agencies and government departments (including those for finance and planning) so as to ensure co-operation and full participation of health services personnel in teaching, research and service activities. It is also essential to ensure the involvement and co-operation of communities in both planning and implementation of FTAs.

2.1.6 Health service personnel should be delegated, as much as possible, to part-time teaching in the FTAs and such contributions should be recognized through faculty appointments, adequate remuneration, special educational opportunities for continuing and advanced education, leading wherever possible to advanced degrees, and other appropriate incentives.

2.1.7 The necessary changes should be made in the methods of appointing faculty members so as to make it possible officially to designate as part-time faculty selected highly skilled community physicians working in routine health services who can bring realism and practicality into the educational process.

2.1.8 For continuing preparation of faculty to staff FTAs, special residencies in community medicine should be set up to provide graded experience, with field work on rotation, leading to advanced degrees and specialization.

2.2 <u>To ministries of health and other concerned official government agencies</u>

2.2.1 Since official health agencies will benefit most from innovative efforts to produce community-oriented health personnel, especially those who will work in MCH and family planning, it is strongly recommended that they actively promote and support the establishment and continuing development of FTAs. Special emphasis should be given, in collaboration with teaching institutions, to improving data collection and record keeping in the teaching health centres.

2.2.2 Official health agencies have also much to gain from field research on community services, especially those oriented to MCH and family planning, and including demographic and epidemiological surveys. Therefore, it is strongly urged that health ministries and other concerned official agencies sponsor and support such surveys and research efforts in FTAs actively.

2.2.3 For each FTA, it is recommended that a joint committee with representation from the teaching institution, official agencies concerned and local communities, provide co-ordination, planning and implementation.

2.3 To the World Health Organization

2.3.1 Recognizing the valuable contribution of the World Health Organization in its continuing efforts to promote commitment to the use of FTAs for the teaching of community health, MCH and family planning it is strongly urged that these highly commendable efforts be expanded through continued direct contacts and negotiations with governments and institutions to stimulate the required educational innovations.

2.3.2 To follow up this seminar, it is recommended that an appropriate implementation mechanism be established, preferably through direct contacts with individuals in key positions throughout the Region and through the provision of a continuing flow of information and educational material.

2.3.3 It is recommended that further seminars and meetings be held at local, national and regional levels to promote an expanded educational impact and implementation.

2.3.4 Two-way visits are also recommended: there should be arrangements for consultants and advisers to visit institutions which are establishing FTAs, and the staff of such institutions should have opportunity to visit ongoing successful FTAs.

2.3.5 Because successful implementation of FTAs depends largely on faculty development, it is recommended that the World Health Organization fellowship programme give priority to the training of teachers in the disciplines of community medicine, MCH and family planning.

ANNEX I

AGENDA

1. Opening Session
2. Election of Seminar Officers: Chairman, Vice-Chairman, Rapporteur
3. Adoption of the agenda
4. Existing situation with respect to Field Training Areas (FTAs) in the Region
5. Brief reports on individual country situations
6. Consideration of objectives for development of FTAs
7. Criteria for selecting FTAs to support training institutions
8. Support to and utilization of FTAs within a country (and as inter-country facility)
9. Conclusions and recommendations
10. Field visits
11. Closing session

ANNEX II

LIST OF PARTICIPANTS

EGYPT

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Isfahan

Dr M. Loghmani
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Isfahan Health Department
Isfahan

Miss A. Riahi
Technical Inspector
Board of Inspectors
Ministry of Health
Teheran

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Maternal and Child Health
School of Public Health
University of Teheran
Teheran

Dr G.A. Leilabadi
Director General of Health
Ostan of West Azerbaijan
Teheran

PAKISTAN	Dr S. Qureshi Principal Public Health School Quetta
	Dr S.B. Agha Assistant Director General Health Maternal and Child Health and Family Planning Ministry of Health and Social Welfare Islamabad
	Dr N.H.A. Khan Joint Secretary Health Department Lahore
SUDAN	Dr A.H. Abbo Senior Obstetrician and Gynaecologist Ministry of Health Khartoum
	Dr M.I.A. Omer Lecturer Department of Paediatrics and Child Health Faculty of Medicine University of Khartoum Khartoum
	Sister F.O. Killa Midwife Tutor Midwifery Training Institute Khartoum Nursing College Khartoum
SYRIA	Dr M.K. Mardini Chief Maternal and Child Health/ Family Planning Division Ministry of Health Damascus
	Dr M.R. Anbari Professor of Child Health Department of Paediatrics Faculty of Medicine University of Damascus Damascus
	Mrs H.H. Fallouh Nursing Tutor School of Nursing Damascus

OBSERVERS FROM HOST COUNTRY

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Dr P. Sadeghi
Instructor of Community Medicine
Pahlavi University Medical Faculty
Shiraz

REPRESENTATIVES OF OTHER ORGANIZATIONS

THE POPULATION COUNCIL

Dr G.I. Zatuchni
The Population Council
Representative
Teheran

or

Mr R. Gillespie
The Population Council
Teheran

WHO SECRETARIAT

Dr S.A. Zafir	Regional Adviser on Family Health and Secretary of the Seminar	Regional Office for the Eastern Mediterranean, Alexandria
Dr A. Robertson	Public Health Administrator, Health Manpower Development	Regional Office for the Eastern Mediterranean, Alexandria
Dr M.C. Thuriaux	Acting Project Leader	Health Services Development Research, Teheran
Dr C.E. Taylor	Consultant	Professor and Chairman, Department of International Health, Johns Hopkins University School of Hygiene and Public Health, USA
Dr N.H. Fisek	Consultant	Professor and Director Institute of Community Medicine, Hacettepe University School of Medicine, Turkey
Dr H.M. Hammam	Temporary Adviser	Professor and Chairman, Department of Epidemiology and Preventive Medicine, Assiut University Medical Faculty, Egypt

Dr H.A. Ronaghy	Temporary Adviser	Chairman, Department of Community Medicine, Pahlavi University Medical Faculty, Iran
Dr M.A. Ansari	Temporary Adviser	Professor of Preventive Medicine, Dow Medical College, Pakistan
Miss C. Cartoudis	Conference Officer	Regional Office for the Eastern Mediterranean, Alexandria
Mrs I. Aref	Secretary	Regional Office for the Eastern Mediterranean, Alexandria

ANNEX III

PROGRAMME

Site: University of Isfahan

SUNDAY, 25 May 1975

8.30 a.m. - 9.30 a.m.	- Registration
9.30 a.m. - 10.00 a.m.	- Opening of the Seminar
10.00 a.m. - 10.30 a.m.	- Recess
	FIRST PLENARY SESSION
10.30 a.m. - 10.45 a.m.	- Election of Officers
10.45 a.m. - 11.00 a.m.	- Adoption of the Agenda
11.00 a.m. - 11.15 a.m.	- Introduction - Objectives and Programme of the Seminar, by Dr S.A. Zafir
11.15 a.m. - 11.30 a.m.	- The present situation - Field training areas in countries of the Region, by Dr S.A. Zafir
11.30 a.m. - 12.30 p.m.	- Brief reports on individual country situations, co-ordinatedly by participants (10 - 12 minutes each country)
12.30 p.m. - 12.45 p.m.	- Discussion
12.45 p.m. - 1.30 p.m.	- Consideration of objectives for development offield training areas, Panel - Dr N.H. Fisek - Moderator Dr H.A. Ronaghy Dr M. Sarram Dr R. Aghaie
1.30 p.m. - 2.00 p.m.	- Discussion
Afternoon - half hour	- Steering Committee Meeting

MONDAY, 26 May 1975

- Introductory field visit to Najafabad Shahrestan
- The Population Council's approach to comprehensive MCH based family planning by Dr G.I. Zatuchni
- Discussion
- Training in maternal and child health, MCH/family planning for front line health workers in West Azerbaijan (Health Services Development Research Programme), by Dr H. Vakil, Dr G.A. Leilabadi, Dr M. Thuriaux
- Discussion

Afternoon - half hour - Steering Committee Meeting

TUESDAY, 27 May 1975

SECOND PLENARY SESSION

8.30 a.m. - 10.30 a.m. - Criteria for selecting field training areas (in relation to objectives) to support training institutions (with examples of existing or potential FTAs)
Panel - Dr M. Loghmani (Moderator: Dr R. Aghaie)
Miss A. Riahi
Dr H.M. Hammam
Dr M.A. Ansari

Discussion

10.30 a.m. - 11.00 a.m. - Recess

11.00 a.m. - 2.00 p.m. - Workshop type group work and group discussions

WEDNESDAY, 28 May 1975

THIRD PLENARY SESSION

8.30 a.m. - 9.00 a.m. - Support to and utilization of field training areas within a country (and as inter-country facility), by Dr C.E. Taylor

9.00 a.m. - 9.45 a.m. - Discussion

9.45 a.m. - 10.15 a.m. - Recess

10.15 a.m. - 11.00 a.m. - Panel - the same subject Dr C.E. Taylor - Moderator - (5 members of the panel to be announced)

11.00 a.m. - 11.30 a.m. - Discussion

11.30 a.m. - 2.00 p.m. - Workshop group discussions (cont'd)

Afternoon - half four - Steering Committee Meeting

THURSDAY, 29 May 1975

8.30 a.m. - 10.30 a.m. - Workshop group discussions (cont'd)

10.30 a.m. - 11.00 a.m. - Recess

11.00 a.m. - 12.30 p.m. - Workshop group discussions (cont'd)

12.30 p.m. - 2.00 p.m. - Joint group discussions
Comparison and consolidation of groups' reports and recommendations

Afternoon - Steering Committee Meeting
- (Preparation of report and recommendations)

FRIDAY, 30 May 1975

8.30 a.m. - 11.30 a.m.

FOURTH PLENARY SESSION

- Presentation of report and recommendations
- Discussion

- Recess
- Approval of report and recommendations
- Closing Session

ANNEX IV

BASIC DOCUMENTS AND BACKGROUND MATERIAL

Basic Documents

PROVISIONAL AGENDA	EM/DEV.FTA.MCH.FP.HP/1
PROVISIONAL PROGRAMME	EM/DEV.FTA.MCH.FP.HP/2 Rev.1
PROVISIONAL LIST OF PARTICIPANTS	EM/DEV.FTA.MCH.FP.HP/3 Rev.1
INTRODUCTION - OBJECTIVES AND PROGRAMME by Dr S.A. Zafir	EM/DEV.FTA.MCH.FP.HP/4
THE PRESENT SITUATION - FIELD TRAINING AREAS IN COUNTRIES OF THE REGION by Dr S.A. Zafir	EM/DEV.FTA.MCH.FP.HP/5
CONSIDERATION OF OBJECTIVES AND CRITERIA FOR DEVELOPMENT OF FIELD TRAINING AREAS by Dr N.H. Fisek	EM/DEV.FTA.MCH.FP.HP/6
OBJECTIVES AND CRITERIA FOR DEVELOPMENT OF FIELD TRAINING AREAS IN SUPPORT OF HEALTH TRAINING INSTITUTIONS by Dr M.A. Ansari	EM/DEV.FTA.MCH.FP.HP/7
CONSIDERATION OF OBJECTIVES FOR DEVELOPMENT OF FIELD TRAINING AREAS IN MCH AND FAMILY PLANNING by Dr H.A. Ronaghy and Mr T.A. Schwartz	EM/DEV.FTA.MCH.FP.HP/8
CONSIDERATION OF OBJECTIVES FOR DEVELOPMENT OF FIELD TRAINING AREAS by Dr M. Sarram and Dr R. Aghaie	EM/DEV.FTA.MCH.FP.HP/9
THE POPULATION COUNCIL APPROACH TO COMPREHENSIVE MCH-BASED FAMILY PLANNING by Dr G.I. Zatuchni	EM/DEV.FTA.MCH.FP.HP/10
TRAINING IN MATERNAL AND CHILD HEALTH, MCH/FAMILY PLANNING FOR FRONT LINE HEALTH WORKERS IN WEST AZARBAIJAN (HEALTH SERVICES DEVELOPMENT RESEARCH PROGRAMME) by Dr F. Amini, Dr H. Vakil and Dr M. Thuriaux	EM/DEV.FTA.MCH.FP.HP/11
CRITERIA FOR SELECTION OF FIELD TRAINING AREAS TO SUPPORT TRAINING INSTITUTIONS by Dr H.M. Hammam	EM/DEV.FTA.MCH.FP.HP/12
CONSIDERATIONS FOR SELECTING FIELD TRAINING AREAS IN RELATION TO NAJAFABAD AREA by Dr M. Loghmani and Dr R. Aghaie	EM/DEV.FTA.MCH.FP.HP/13
SUPPORT TO AND UTILIZATION OF FIELD TRAINING AREAS WITHIN A COUNTRY (AND AS AN INTER-COUNTRY FACILITY) by Dr C.E. Taylor	EM/DEV.FTA.MCH.FP.HP/14

Background Material

The Integration of MCH and Family Planning Activities in the General Health Services, EM/RC21/Techn.Disc./2

Maternity-centred Family Planning Programme, Guidelines, MCH/71.2 Rev.1

WHO Technical Report Series No. 400, Paediatric Research

WHO Technical Report Series No. 428, The Organization and Administration of Maternal and Child Health Services

WHO Technical Report Series No. 442, Health Aspects of Family Planning

WHO Technical Report Series No. 457, The Prevention of Perinatal Mortality and Morbidity

WHO Technical Report Series No. 476, Family Planning in Health Services

WHO Technical Report Series No. 483, Health Education in Health Aspects of Family Planning

WHO Technical Report Series No. 485, Human Development and Public Health

WHO Technical Report Series No.508, Education and Training for Family Planning Health Services

WHO Technical Report Series No. 558, Community Health Nursing

WHO Public Health Paper No. 17, Paying for Health Services: A Study of the Costs and Sources of Finance in Six Countries

WHO Public Health Paper No. 47, Aspects of Medical Education in Developing Countries

WHO Public Health Paper No. 49, Interrelationships between Health Programmes and Socio-Economic Development

WHO Public Health Paper No. 53, Family Planning in the Education of Nurses and Midwives

WHO Public Health Paper No. 57, Teaching of Human Sexuality in Schools for Health Professionals

Comprehensive Family Planning Based on MCH Services, A Publication of the Population Council, Studies in Family Planning, Vol. 2, No. 2, February 1971

An Integrated Health/Family Planning Programme in Etimesgut District, Turkey, A Publication of the Population Council, Studies in Family Planning, Vol. 5, No. 7, July 1974.

ANNEX V

INAUGURATION ADDRESS H.E. AKBAR ZAD,
GOVERNOR-GENERAL OF THE PROVINCE OF ISFAHAN

H.E. Dr Sardari, distinguished guests and participants, ladies and gentlemen,

On behalf of the people of this province, I wish to welcome you warmly to the city of Isfahan. We feel happy and fortunate in being the host to this Regional Seminar on the Development of Field Training Areas, which is held by the World Health Organization, and the University of Isfahan in our historic city. In the Province of Isfahan there is a great attempt to put into action the progressive desires of our beloved King, the Shahinshah Aryamehr in filling the gap of improvements between our urban and rural communities. Our socio-economic progress for the region within the framework of the national policy is formulated in such a way that it will provide equal public services and opportunities to all the people whether they live in cities or villages.

In such achievements, we have a long way to go. However, being inspired by the sound ideas and brilliant guidance of His Imperial Majesty, we have no fears but the courage to pave such a road. Our intention is to develop the province in a way that culture, side by side with industry and agriculture, plays its role for betterment of the life of the inhabitants, and their increased happiness. Such an idea is not only limited to the region of Isfahan, but covers the nation as a whole.

Having this concept in mind, I assure you that the theme and conclusions of this WHO Seminar are of utmost importance to us and will give us more insight in our future planning.

Here I wish to extend our thanks and appreciation of the authorities of WHO and the eminent scientists and experts for coming to Isfahan and holding such a fruitful Seminar in our city. We definitely look forward to have concrete and practical suggestions for solving our related problems.

Ladies and Gentlemen, may I wish a great success for your Seminar and sincerely hope that your stay in the historic city of Isfahan will be a happy and memorable one. Thank you.

ANNEX VI

ADDRESS BY H.E. A.M. SARDARI, M.D.
UNDER-SECRETARY FOR POPULATION AND FAMILY PLANNING
MINISTRY OF HEALTH, TEHERAN, IRAN

Ladies and gentlemen:

It is a great pleasure for me to address this Seminar on Development of Field Training Areas, their Needs and Advantages for the Teaching of MCH and Family Planning to Health Personnel.

I would like to thank WHO and the University of Isfahan for organizing this Seminar to enable us to discuss this very important and necessary subject for the progress of health standards in the Eastern Mediterranean Region.

The growing importance of providing suitable training opportunities in the various aspects of population and family planning to physicians and other health personnel during their basic professional training, has been duly felt in the developing countries, as has been the need for providing the training institutions involved with the various means and tools to make their teaching effective.

Different countries have already established, or are in the process of establishing, such training centres in locations where facilities for field training are available, so that trainees may observe programmes in action in the community. In Iran, we have established six family planning and MCH training centres in large provincial capitals for in-service training of health personnel. One of these centres is located in Isfahan. These centres have been functioning from the start of the programme. Physicians, midwives and other health personnel from the provinces where the centres are located, as well as from neighbouring provinces, participate in the courses held at these training centres. The trainees comprise both Ministry of Health personnel and the personnel of other health organizations which co-operate in the Iranian Family Planning and MCH Programmes.

The various subjects are taught jointly by university professors and MCH and family planning experts of the Ministry of Health in that area. The courses are mostly of one-month's duration and are given during ten consecutive months of each year. The participants spent half their time in the health centres actually observing and practising what they have learned in classes. We have attempted to provide model health centres in the cities and in the adjacent rural areas for the practical training of the participants.

Since the beginning of the Population and Family Planning Programme, these centres have trained over 8 416 physicians, midwives, nurses, nurse-aides, rural midwives and motivators, and prepared them to work in family planning and MCH centres throughout the country. In addition, extensive family planning and MCH training has been given to members of the Women's Health Corps in their eight training centres throughout the country, in order to prepare them to work in family planning and MCH clinics. The training period for Health Corps members is six months and takes place twice each year. Up to the present, 6 443 Women's Health Corps members have been trained in population, family planning and MCH during twelve consecutive training sessions. They have been working for eighteen months in different areas of the programme, as physicians, rural midwives and population education, motivation and communication agents and statisticians.

In the army training camps, training in these fields has also been given to members of the Male Health Corps, by population, family planning and MCH experts. Already, 10 279 Corps members have been trained and assigned to rural areas throughout the country, to operate as mobile health teams. One of their main functions is family planning and MCH activities.

The training of health personnel in the field of family planning and MCH has consistently expanded and it is expected that the number of training centres and participants will continue to expand in the coming years.

This Seminar provides an excellent opportunity to the participants to exchange their views and to discuss the needs and advantages of field training in the areas of teaching population dynamics, family planning, MCH, and other related subjects to health personnel. The recommendations of this Seminar will have great effect on the improvement of teaching and field training activities of such centres and especially will have great impact on improving the training opportunities for health personnel in the areas of co-ordination and teamwork, which are so urgently needed for the progress of family planning, MCH and other public health programmes.

I hope that this Seminar will also discuss the subject of teaching population, family planning and MCH in medical, midwifery and nursing schools, as we have experienced that the inclusion of these subjects in the basic professional training of future health workers, is very essential and of the utmost importance.

In Iran, we have included the teaching of population, family planning and MCH in the curriculum of all medical, midwifery, nursing and nursing-aide schools from the beginning of the programme. The co-ordination and standardization of teaching these subjects in the universities and institutions of higher education in Iran, was the topic of a seminar held in Shiraz two years ago. This seminar was held under the joint auspices of the Ministry of Health and Pahlavi University of Shiraz. Participants included representatives of various universities. The recommendations of this seminar have helped greatly in achieving better results in our basic training programmes for health personnel.

I hope this Seminar will be successful in reaching its goals and that some clear conclusions and detailed recommendations will be established for the planning and development of field training areas.

Finally, I hope that all participants, especially our guests from countries of the region, will have a pleasant stay in this historic city of Isfahan.

Thank you.

ANNEX VII

MESSAGE FROM DR A.H. TABA
DIRECTOR
WHO EASTERN MEDITERRANEAN REGION

It gives me great pleasure to convey these words of greeting, welcome and good wishes to the participants of this important regional meeting. I regret that, due to my pressing commitment to attend the World Health Assembly in Geneva, I am not able to attend personally as I would very much have liked to.

I should like to express my thanks and deep appreciation to the Imperial Government of Iran, and to His Excellency Professor A. Pouyan, Minister of Health, for hosting the Seminar in the country, and to the University of Isfahan and to His Excellency Chancellor Ghassem Motamedi, who have provided the facilities of the Isfahan Medical Faculty as the venue for the meeting.

The subject of the meeting is extremely important to the teaching and preparation of medical students as well as other health personnel, and this is not only from the point of view of strengthening the teaching of MCH and family planning which, of course, has been largely neglected in the past and because of its considerable consequence for the present and for the future needs continually to be more and more emphasized. I believe that the meeting is of wide ranging importance, and the importance goes even beyond that which has been implied in its title. It provides an essential opportunity of community observation and experience to help achieve a balanced and realistic outlook of both the students and the faculties towards the social needs and objectives of the health care system as a whole.

As all of us know, the education and training of health personnel, the development of manpower needed for our health services, has come to be recognized as a much more complex matter than we may have thought only a few years ago.

When "classroom learning" was what was thought to be needed in order to train good doctors, good nurses and other good health workers, then our concern for learning facilities was more or less confined to the provision of a few well designed classrooms, some adequate laboratories properly equipped, and some hospitals and other health institutions in which they could observe and work with the sick, whom they were being trained to help. In recent years we have realized that health is much more than curing the sick, and that learning is much more than listening and observing.

For the teaching and learning process of health personnel, suitably selected field training areas are like wide windows on the community which help keep classroom and bedside teaching in proper perspective and on the right course, since they make it possible to observe individuals, families and communities as a whole, in both health and disease and in the context of their true environment. Hospital out-patients are also some sort of indirect peep-holes on the communities they serve, but they are rather gloomy and of limited value as they have the tremendous handicap of providing a coloured and biased vision of segments of communities, through selection of people by illness, and what is no less disturbing, the individuals are observed out of context of their families and general environmental situations.

The World Health Organization has an abiding interest and commitment in the people's health, in its physical, mental and social aspects, and for its protection and promotion. Human reproduction and family planning are seen to be closely related to people's health, and in this respect the resolutions adopted by the World Health Assemblies since 1965 have given the Organization a broad mandate to work in these health related areas. WHO is thus enabled and is providing assistance to interested countries on a broad front of human reproduction, family planning and family health, in terms of research activities or services, depending on

national policies. WHO assistance is specially focussed on the training phase of health personnel, both basic professional education and post-basic, and therefore our emphasis on the subject of this meeting is intended to provide impetus to the formerly neglected subject of maternal and child health and family planning, and at the same time to help balance the teaching and learning process in classrooms, bedsides of patients and laboratories through continuing contact with live and representative communities.

It is now increasingly realized by countries as well as by some international agencies, specially WHO and UNICEF, that the vast majority of populations in developing countries tend to be rural and under-provided in the context of general socio-economic activities of the country, including the health care services. It is therefore being increasingly appreciated that health care systems should not operate as islands in and around urban areas in a country, but should grow out of the needs of, and extend into, the remote rural areas through graded facilities and efficient referral systems, and above all inter-link with, strengthen and rationalize existing indigenous health care systems however rudimentary and primitive. This is one of the basic principles of primary health care which is receiving growing attention internationally and in the World Health Organization.

The importance of using field training areas and thus providing contact of health personnel trainees with the community, especially of medical students, was stressed in the Second WHO Conference on Medical Education in the Eastern Mediterranean Region held in Teheran in 1970. It has also been stressed in other national and international meetings. However, in our Region this aspect has not yet received adequate implementation.

I would like to take this opportunity to recall the privilege and honour I was given to address the Third Pahlavi Medical Congress at Shiraz in April 1972, and would request your indulgence to repeat here a few points from that occasion. I had quoted the words of Professor Walsh McDermott of the Cornell Medical College (1966) that "to graduate superbly trained physicians is not a social end in itself ...". I had emphasized that the physician of to-day and tomorrow must be more than superbly trained scientist and technologist; he should have opportunities of knowing his community first hand and should then be able to endeavour and contribute his share to the improvement of society; in short he should understand and play equitably his role as an agent of social change. On that occasion, as on so many others, I emphasized the relevance of medical, and other health professional, education to the needs and demands of communities, the importance of defining of our goals in this regard, and of providing for professional satisfaction through broad-based and balanced training keeping in mind the communities to be served. I feel that these points can bear re-emphasis.

The objectives of this Seminar are to provide participants with an opportunity for exchange of views and ideas on the subject; to establish recommendations for the development of Field Training Areas as learning facilities for health personnel; and ultimately, with the establishment of suitable Field Training Areas to provide health personnel with organized occasions, during their training and thereafter, for appreciating the need of balanced health care services, and of co-ordination and team work among themselves.

I have observed from the agenda and programme of the meeting that you, the participants, have interesting and stimulating presentations and discussions ahead of you. I wish you all fruitful deliberations and a successful meeting.

ANNEX VIII

WELCOME ADDRESS ON BEHALF OF THE UNIVERSITY OF ISFAHAN
BY PROFESSOR A.M. BEHBEHANI, VICE CHANCELLOR FOR RESEARCH, UNIVERSITY OF ISFAHAN

Your Excellency, Governor General Mr Zad and your excellency Dr Sardari, distinguished participants, and guests to the Seminar on the Development of Field Training Areas, their Needs and Advantages for the Teaching of MCH and Family Planning to Health Personnel, on behalf of the Chancellor H.E. Dr Motamedi who asked me to convey to you his regrets and apologies for not being here today, I should like to welcome all of you to the University of Isfahan.

As you all can see, we are a young University, but we consider Seminars such as these of immense importance in our educational development and the service that our University can perform for the population that we serve. Not only are such WHO Seminars of great importance but training in the field of health personnel is very close to the heart and special interest of the Chancellor as an epidemiologist and public health and community medicine man.

As an example of the importance that we attach to this field, we have established a Centre for Population at the University, physically adjacent to the Department of Public Health and Community Medicine. As part of the latter, we have recently begun the establishment of four field stations for medical undergraduate training and research. Each station is being established to take advantage of a different particular human ecological environment such as urban, mountain, etc. I am sure that within the context of the discussions during the next few years you will hear more about our plans.

We would like to thank Dr Taba, Regional Director of WHO, for the opportunity of having this Seminar at the University of Isfahan and the Chancellor and I, as mentioned earlier today, will be looking forward to the results of your discussions and recommendations.

As we all are aware, the real usefulness of WHO Seminars is the provision of time and opportunity for direct exchange of ideas and the refinement of these ideas to the point where they may be used as practical recommendations for implementation in medical education or practise in our Region. One measure of success, obviously, is how explicit and concrete these recommendations and conclusions are expressed and with time, the number of recommendations that are actually implemented within the Region. Let me wish you, the participants, a very fruitful conference and if you are in need of anything, our staff will do their utmost to oblige. Thank you.

ANNEX IX

INTRODUCTION, OBJECTIVES AND PROGRAMME
BY
DR S.A. ZAFIR
WHO REGIONAL ADVISER ON FAMILY HEALTH

I INTRODUCTION

1. Historical

The history of medicine is almost as old as human history, and stretches back into the long dim unrecorded past. However, some of the ancient magical and superstitious practices which denied direct observation and defied logic and rationalization, still tend to rub shoulders with the scientific mystique of modern medical technology. Whereas the ancients were frequently the victims of their own fantasies, thus losing track of reason and relevance, the modern health workers are not infrequently side-tracked by undue pursuit of detail and by isolated efforts in treating the sick, out of context of the latter's family and natural environment. Caution has been sounded against such misplaced emphasis many times since the time of Hippocrates, and various remedial measures have been advocated and adopted, some of which need wider emulation.

While trying to remove the cobwebs of superstition from around epilepsy, Hippocrates said "Every disease has its own nature and arises from external causes",(1). He is famous for viewing disease with the eye of a naturalist, for studying the entire patient in his environment, and for laying emphasis on observation, logic and reason. His better known book " Air, Water and Places" is a treatise on human ecology. He is thus credited for laying the foundations of scientific medicine, which was built upon by great physicians and "wise men" who followed him, such as Galen, El Razi, Avicenna (Abu Ali Ibn-Sina)[1], and others down to our time.

2. Institutional versus community-oriented medicine

However, during the last hundred years or more medicine and its practice has become more and more institutionalized, partly from necessity because of the growing need for laboratory investigations and the increasing demands of medical technology, and partly because the medical profession tends to be traditional and conservative, seeking refuge or glorification in the "ivory towers" of hospitals and other specialized institutions. Medical education has generally tended to follow in these footsteps. However, a refreshing breeze of skeptic counter-current has picked up for some time, and hopes for achieving a balanced approach seem to be well founded.

3. MCH and family planning aspects

Another aspect of the conservatism of the health professions in general and the medical profession in particular, is the fact of their insufficient involvement in the health aspects of family planning. This is partly due to the cultural value systems and notions about family planning of those societies within which the health professions exist, and with characteristic high regard for their reputation the health personnel tend to accept change of attitude on this subject more slowly than their parent cultures. In this connexion

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[1] It is interesting to recall that almost 950 years ago, the great Avicenna, Prince of Physicians as he was later called in the West, arrived in this famous city of Isfahan to spend the remaining most fruitful fourteen years of his life; the teaching and practice of medicine had not yet retreated behind closed doors.

Dr Taba, in a message to a national seminar in another country of this Region said:

> "While the problems and treatment of infertility on the one hand and of venereal disease on the other have been readily accepted as health related responsibilities, the needs of contraception, birth control and other sex-related aspects have been side-stepped for long. The time has come now to meet these health related needs of society lest insufficiently trained personnel step in to supply the services." (2).

It is therefore, intended that this meeting will address itself to the above-mentioned twin problems of insufficient community orientation of students of health professions in general, and medical students in particular, and their insufficient involvement in the teaching and learning of MCH and family planning, during their basic professional education.

4. Previous recommendations

Although the emphasis of this meeting is on the teaching of MCH and family planning and to help establish and use FTAs for this purpose, the first step of locating suitable communities and developing them as FTAs in affiliation with respective health training institutions has to be taken first. This implies integrated teaching of MCH and family planning with other subjects such as preventive medicine, public health nursing, preventive paediatrics, domiciliary midwifery and others.

There have been previous recommendations on the subject of community-oriented teaching, but the results in the countries of our Region are far from complete. There is considerable room for more initiative and efforts.

The CENTO Conference held in Shiraz (1961)(3) on Teaching of Preventive Medicine recommended field training for medical students; the Second WHO Conference on Medical Education in this Region, held in Teheran (1970) (4) recommended community-oriented teaching and more recently the WHO Group Meeting on the Teaching of MCH and Family Planning held in the Eastern Mediterranean Regional Office (1973)(5), while suggesting various steps in the role of respective departments, recommended the following under the heading of "Other activities":

> "Series of learning experiences at both pre-clinical, clinical and internship stages would be highly desirable. Students should be familiar with crucial health problems and their consequences in the local context through performing health and demographic surveys; by analyzing and resolving community health problems and by planning for total community health care. This would include clerkships and internships in community health with residential assignments and responsibilities to communities and the regular health service staff".

II OBJECTIVES

1. Long-term objective

The ultimate objective, through the establishment of field training areas in support of medical schools and other health professional institutions, is to help improve the community orientation of the members of hea lth team and co-ordination among themselves, in order to provide balanced preventive, curative and promotional health care services to the community.

2. Immediate objectives

The following were the immediate objectives of the meeting:

(a) to provide the participants with an opportunity for exchanging views and experiences, and holding detailed discussions on the needs and advantages of field training areas for the teaching of population dynamics, MCH, family planning and related subjects to medical and other health professional students;

(b) to establish recommendations for developing field training areas for the teaching of population dynamics, MCH and family planning and the teaching of community aspects of medicine generally.

3. Behavioural objective

It is expected that after going through the experience of the meeting, specially the experience of field visits, group discussions, individual readings and some group work, all the participants will be able to make their own assessment of the need for developing field training areas for supporting and supplementing the teaching and learning process of students, and to make outline plans for establishing FTAs,as appropriate.

This meeting is intended to provide yet another link in the chain of supporting events being assisted by the WHO Regional Office towards strengthening of teaching MCH and family planning in this Region. Previously, national seminars on the subject have been held in three or four interested countries in collaboration with respective national authorities, followed by a Regional Group Meeting. Currently an exchange of professors of Preventive Medicine, Obstetrics and Gynaecology, and Paediatrics, among medical faculties of at least three countries has been started, to participate in the teaching of MCH and family planning in host institutions along with host colleagues to help strengthen the integrated teaching of these subjects.

III PROGRAMME AND METHODS

1. Nature of the meeting

The meeting was intended to be both in the form of a seminar with presentations and discussions during the first half, and also in the form of a brief workshop comprised of small group discussions in the last two or three days, when individual participants will be in a position to put down their own thoughts in the form of summaries and outlines, and after discussing them in small groups to arrive at agreed joint group efforts. The views and suggestions of these sub-groups will then be presented one after another to the whole group, for discussion leading to the meeting's report and recommendations.

IV CONCLUSIONS

1. It is proposed to focus the sub-group discussions on respective country needs where the participants have come from, with group members generally representing complementary faculty disciplines (mainly medical and some nursing), with one or two health services administrators to help bring in the health services objectives and points of view for future strengthening of professional training. The generalizations that can be gathered from the country-oriented sub-groups' discussions and outline proposals would become the whole meeting's conclusions and recommendations, while the country proposals themselves (in brief and clear outline), could well become practicable proposals for respective countries, and could be included as annexes to the report.

2. The problems and difficulties in relation to already functioning FTAs, described by some participants, would seem to require considerable review and discussions in the sub-groups,

and more so in the whole meeting when the sub-groups come together from time to time or once towards the end, according to the preference and decision by all the participants. These issues of problems and difficulties as well as the suggested solutions need to be identified in terms of their general applicability as distinct from rare or unique country situations.

References

1. Encyclopaedia Britannica (1974) Macropaedia Vol,II, "History of Medicine", page 827.

2. A.H. Taba, Message to National Seminar on Teaching of Family Planning and Maternal and Child Health in Medical Colleges and Post-graduate Nursing Schools, Karachi, 11 - 15 October 1971.

3. CENTO 1961, Teaching of Preventive Medicine, Conference, Shiraz, Iran, May 1961. (Shiraz, Iran, Office of U.S. Economic Co-ordinator for CENTO Affairs).

4. WHO, Second Medical Education Conference in the Eastern Mediterranean Region, Teheran, December 1970 (WHO, EMRO, Alexandria).

5. WHO, Group Meeting on the Teaching of MCH and Family Planning in Medical and Nursing Institutions, Alexandria, February 1973, page 22 (WHO, EMRO, Alexandria).

ANNEX X

GUIDELINES FOR WORKING GROUPS

Make-up of groups

There will be five groups. Each group will consist of the participants from one of the countries represented (Egypt, Iran, Pakistan, Sudan and Syria), plus one Iranian observer, and one resource person from the secretariat. Three resource persons (Drs Taylor, Robertson and Zafir) will revolve between the five groups.

Each group will select its own moderator, from amongst its participant members, and a group rapporteur who, jointly with the resource person, will prepare the report of the group.

Reports of the groups

Each group is asked to prepare a report.

Each group should respond to the following questions:

Bearing in mind the training patterns and the needs for health personnel in your country:

1. What would be the objectives of an FTA (or FTAs) which you would like to see developed?

(The group may wish to consider the following points:

(a) Learning objectives (knowledge, attitude, skills)
(b) Research objectives
(c) Service objectives
(d) the interrelationships between (a), (b) and (c), above
(e) An FTA is itself a tool for the achievement of a wide range of learning objectives, but
(f) The question: "Just what is this FTA for?"has to be answered to avoid over-generalization and loose thinking).

2. What criteria should be laid down for the selection of an area to be used as an FTA?

(The group may wish to consider the following points:

(a) Size (population and area)
(b) Nearness to or distance from the training institution to which it is affiliated
(c) Rural/urban make up
(d) Ethnic, occupational, general socio-economic, mix
(e) Whether to be with services run by the training institution, or to develop a collaborative relationship which public/private health service provides
(f) How much do existing health services in the area have to be supplemented?)

3. How would you build up the Data Base required to make the FTA an effective learning resource?

(The group may wish to consider the following points:
(a) Use/adaptation of existing data
(b) Survey techniques: which kind?

(c) Use of students in collecting and collating data and learning by so doing.
(d) The simplest information: the least expensive approaches.
(e) Time constraints).

4. Organization and sequence of FTA utilization:

(a) How would you achieve the right balance between observation and responsible participation by the students and staff concerned?
(b) How would you involve your students in the health team approach?
(c) How would you ensure that your students learned proper approaches to an integrated kind of health care? (Curative and Preventive; MCH, Family Planning; 1ary Care, at appropriate levels, 2ary and 3ary Care referral mechanisms, supervisory patterns)

(d) How will you ensure that your students will learn to build in a measuring approach to everything they do?

5. What do you see as the essential prerequisites to setting up an FTA:

Attitudes of teachers and the teaching institution?
Student attitudes?
Funds?
Personnel?
Structures?
Contractual relationships (e.g.between University/Ministry; Training School/ Health Authority, etc.)
Facilities (Health/Centre: local clinics, etc.)
Transport?

6. What do you see as the main challenges in implementing an effective FTA?

(The group may wish to consider the following points:
(a) Adapting clinical and other scientific skills to community ends?
(b) Gaining acceptance for emphasis/time etc., to rank equally with clinical, classroom and laboratory learning experiences?
(c) Gaining community acceptance for the FTA?
(d) Preserving the usefulness of an FTA and preventing oversaturation?
(e) How to make community training as intellectually stimulating and enjoyable as other forms of learning?)

ANNEX XI

SURVEY OF SUMMARY INFORMATION
ON EXISTING AND PROSPECTIVE FIELD TRAINING AREAS

It will greatly help to bring about good discussion at the Seminar if we can have available some up-to-date information about felt needs for establishing the field training areas (FTAs), where they do not exist at present. We are, therefore seeking from each participant some background information, along the lines shown below and in the accompanying "Outline".

Please attach all information and responses in double-spaced typed sheets.

Your co-operation in providing this requested information by 31 March 1975, will be greatly appreciated.

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1. In case your institution is already using or about to use an FTA as a supporting facility to the teaching of medical/nursing students (even if family planning aspects are not included), please use the attached outline of headings for preparing a description.

2. If your institution is not using an FTA, are you aware of any other health personnel training institution in your country, which is using such a facility? (Please mark the applicable) Yes ..... No .....

3. In case your answer is "yes" to the question above, please obtain and provide as much information about the FTA(s) as possible, using the attached outline of headings.

4. If your institution is not using an FTA, and assuming that you agree with the objectives of this meeting, please consult your interested colleagues in the Faculty (specially in Departments of Public Health/Preventive/ Community Medicine, Paediatrics, Obstetrics and Gynaecology), prepare briefly and kindly send us the following:

   (a) a statement of objectives for establishment and utilization of an FTA, for teaching the subject of community health/medicine to medical/nursing students/ or any other health personnel considered desirable, with special reference to maternal and child health, family planning and population dynamics; and an indication of expected results of such teaching;

   (b) an outline proposal for the establishment and functioning of the proposed FTA, using the attached outline of headings, to the extent feasible;

   (c) a concise yet complete review of expected problems and difficulties (mainly by listing them + brief comments), in the matter of establishing a functional FTA, e.g. area, size of population and distance of a possible target community; funds; transport; curriculum committee support; student attitudes, etc.

5. You are invited to make any other comments and suggestions you consider relevant.

OUTLINE OF HEADINGS AND SUB-HEADINGS FOR DESCRIPTION OF FUNCTIONING FIELD TRAINING AREAS

(for education and training of health personnel, including teaching of MCH, Family Planning and Population Dynamics)

1. General Description

(a) location (distance from a known point, e.g. a medical school, etc.);
(b) size of area, in sq. miles/kilometres, localities (villages/towns, etc.),
(c) general socio-economic characteristics of population;
(d) demographic information on population, e.g. urban/rural, sex and age composition (population pyramid), vital rates, in/out migrations;
(e) other relevant information, e.g. specific features of access, logistics, co-ordination with local administration/health services, etc.

2. Existing Health Services

(a) physical facilities, types, locations, utilization by population, etc.;
(b) staff, categories, numbers, in case of special categories some description of previous education and health training, etc.;
(c) functional and operational aspects;
(d) existing health conditions, e.g. IMR, leading causes of morbidity and mortality, notable health problems, etc.,
(e) special health plans, e.g. periodic health plans for expansion of health services, physical facilities, training of health personnel, etc.,
(f) please enclose a set of blank record cards/forms, e.g. family and clinical records.

3. Services in Relation to Family Planning/Family Health

(a) kind of services - please give broad details;
(b) acceptance - data - please give broad details,
(c) KAP study reports, etc.;
(d) please enclose a set of blank record cards/forms, e.g. family and clinical records.

4. Teaching Activities

(a) main institutions/departments responsible, staff involved in teaching in the field; categories, designations, numbers, etc.,
(b) arrangements for students, e.g. years/categories; numbers, manner of involvement (data collection, participation in health care, etc.); daily visits to hostel arrangements, etc.;
(c) teaching schedules, time-tables, weekly/monthly; hours of each activity,
(d) teaching methods used, e.g. lectures, group discussions, practical work, supervision, etc.; please give a brief description of how these and other methods are utilized with comments on their effectiveness and shortcomings;
(e) assessment of student participation, e.g. examinations, maintenance of field-work journals/diaries, written reports, etc.

5. Conclusions

(a) brief comment on your general satisfaction or otherwise with present status and arrangements at the FTA;
(b) brief comment on preserving the usefulness of an FTA - main problems in this connexion and their solutions;
(c) any planned changes or modifications;
(d) any other comment.

ANNEX XII

HOUSEHOLD SURVEY

Check List for Interviewing Midwives and Other Field Workers

1. Would you tell me what is your working routine in a day?
2. Do you have an area to cover with home visiting? and do you have a regular schedule?
3. How many families are in your area?
4. Do you plan to continue to work in this area or do you want to be transferred? (if yes) Why?
5. What kind of training did you receive before starting to work?
6. To whom do you regularly report? How frequently do you see him (or her)? Do you want to see him (or her) more frequently or less?
7. What kind of help does he (or she) give you?
8. Do you know every pregnant woman in your area? What is your responsibility in ante-natal - natal - postnatal care?
9. How do you motivate women to use family planning?
10. What kind of food do you suggest for an infant at six months of age?
11. What diseases cause the most deaths in children?
12. Have you seen any cases of tetanus neonatorum? What should be done to prevent it?

QUESTIONNAIRE FOR NAJAFABAD HOUSEHOLD SURVEY

1. Household Composition
   a. Listing of household members
   b. Age - sex - education
   c. How many pregnancies were there - how many children died and age at death?
   d. Occupation of father
2. Where was the last child delivered and by whom?
3. For each member of this household, how many illnesses have occurred in the past two weeks and what were they?
4. For your care:
   a. To whom did you go - or did you use home remedies?
   b. How long did it take to get there?
   c. What was done?
   d. How much did it cost?
      direct
      indirect
5. What preventive services reach your community?
   a. Immunization
   b. Malaria control
   c. Nutrition
   d. Family planning
   e. MCH
   f. School health

6. What are the main problems you face in getting health care?

1. Household Composition - Identification Number ....
Occupation of Father .....

List of Members	Age	Sex	Education	Illnesses in past 2 weeks	Source of Care	Time to get there	What was done	Cost	
								Direct	Indirect
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
Children who died			Cause of Death						
1.									
2.									
3.									

ANNEX XIII

CONSIDERATION OF OBJECTIVES AND CRITERIA FOR DEVELOPMENT OF FIELD TRAINING AREAS

by

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WHO Consultant

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INTRODUCTION

Medical practice has been limited for centuries to the treatment of patients and injured persons upon their request. The gradual development of preventive and social medicine since the mid-nineteenth century has added new dimensions of social responsibility to medicine. The new facts and ideas which have emerged may be summarized as follows:

- Promotive, preventive, curative and rehabilitative activities in medical practice should be integrated and co-ordinated at all levels (Figure 1).

- Primary and secondary prevention and medical care should be given the highest priority in health care.

- The most important diseases are the ones which affect most people, not the cases which are "interesting" from the standpoint of clinical practice.

- Contemporary medicine requires consideration of health problems at family, community, country and world levels in addition to the individual level.

- The development of social sciences, especially human ecology, has influenced thinking about the practice of medicine but now needs to permeate practice. Leading physicians have realized the necessity of considering man in relation to his whole environment; this is a complex and interacting system consisting of physical, chemical, biological, social and cultural elements.

- Community surveys have demonstrated that most patients do not go to physicians even if they are severely ill, especially in the developing countries. Therefore, all measures - such as home service, periodic examination of people at risk, free care, etc. - should be made available in order to obtain betterment of health for every human being.

- Contemporary medicine can no longer be practised by a single doctor. It requires team work. The creation of a health team creates new responsibilities for physicians, i.e., providing leadership for the health team and training team members on the job. The physician's contribution in these matters becomes more vital when some of the functions of the physician are transferred to his or her associates.

- The pattern of diseases in the community is very different from the pattern in hospitals. If students are not exposed to the aspects of health and disease in the community, their training will not be complete.

- Total health care, which is the implementation of the contemporary philosophy of medicine, requires taking care of individuals throughout their lives, both in health and in sickness. The hospital is not a suitable ground for this purpose. Students should observe and participate in health practice in the community as members of a health team or as clinical clerks in family practice in order to learn how to serve both the healthy and the sick in communities.

These developments in medicine as well as radical social changes in the world have caused the emergence of a new philosophy of medicine. Today, it is accepted that the purpose of medicine is "to secure the highest attainable standard of health for every human being without distinction of race, religion, political belief, economic and social condition."

This end cannot be attained solely by treating the patients who come to hospitals or surgeries on their own initiative. It requires the implementation of a comprehensive health programme which includes promotive, preventive, curative and rehabilitative activities and which considers the individuals, the environment and the community as a whole.

This change in the philosophy and practice of medicine has started to influence medical education, in fact some medical educators have been in the forefront of the new developments. Training medical students in a hospital and teaching them only biological and clinical subjects have been insufficient. Therefore, medical educators have suggested that social science subjects related to health care should be included in the medical curriculum, that epidemiology should be more extensively taught than before and that field training areas should be established.

The rest of this paper will focus on the question of field training.

THE OBJECTIVES OF FIELD TRAINING

The purpose of field training is to combine the teaching of the new aspects of community medicine with preparing students to practice medicine within the constraints of existing facilities in their own communities

The main objectives of field training then are:

1. to train students in the study of community health problems,

2. to prepare them to practice total health care,

3. to enable them to work with a health team in a community.

These objectives are valid for the field training of students both in more developed and less developed countries the latter are more acute. Therefore this discussion will focus on defining the specific objectives for field training of students in LDC's.

In order to attain the above-mentioned objectives, students should acquire knowledge and gain experience during their field work in the following areas. They should learn:

1. the difference between the patterns of disease and causes of death in hospital populations and in the community;

2. about the great frequency of undetected cases of serious diseases at the pre-symptomatic stage;

3. that high fertility is a major problem of health and family welfare,

4. the influence of environmental factors, nutritional status and availability of health services on the health status of the individuals;

5. how to balance the factors affecting utilization of available health services by the people and ways of increasing the use of such services;

6. how to design, implement and evaluate community studies using epidemiological methods as tools for the diagnosis of community health problems;

7. how to cooperate with social organizations whose help is needed in providing better health care to the public;

8. the value and limitations of periodic examination of persons under increased risk - such as children, pregnant women and aged persons;

9. how to organize home care for patients and especially the management of the care of patients suffering from chronic diseases;

10. how to provide patient care with limited facilities;

11. how to work out patterns of cooperation between hospitals and home and ambulatory care services;

12. how to integrate prevention and primary care;

13. the importance of health education of the public and how to do it;

14. how to observe and supervise health teams in action with understanding of the duties, problems and contributions of each team member and how to evaluate their performance;

15. the need for research for improving the delivery of health care;

16. how to supervise with the intent of motivating, supporting and training team members on the job;

17. the advantages of following the health status of people from birth to death and — keeping health records;

18. the importance of systematically collecting statistical information on the community;

19. how to observe and understand the socio-economic problems of the community and how to view health problems as part of a wider socio-economic system.

THE FACILITIES FOR FIELD TRAINING

Students may be trained in community practice in health centres, in the offices of family physicians or in specialized public health units - such as tuberculosis dispensaries and MCH centres.

Health centres where patient care and all preventive activities are carried out are the most suitable centres for training students. However, these centres are usually very crowded, under-staffed and poorly equipped in less developed countries. Under these conditions, students may only get to see the low quality of care which is provided to the public in these centres. This may obscure the more important features of comprehensive medicine and they may not learn to appreciate the significance of total health care which is a primary objective in establishing field training areas. Therefore, special all-purpose health centres should be established for teaching students if the services rendered in existing centres are not satisfactory for training purposes. Special attention should be directed to ensure that the teaching health centres have a well-organised MCH and family planning service reaching every house both for home-care and prevention. Etimesgut Health District examplifies this type of a field training area.(1)

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(1) An Account of the Activities of the Etimesgut Rural Health District, 1967-1969 Hacettepe Press, 1970

FISEK, N. H., An Integrated Health and Family Planning Programme in Etimesgut District, Turkey - Studies in Family Planning 5(7), 210-220, 1974

An alternative to the establishment of teaching health centres is the use of family physicians for training purposes. If schools prefer to employ family physicians for training students in the field, these physicians should not function merely as primary care physicians but they should also be responsible for prevention in families under their care. The preventive services should include periodic examination of children, pregnant women and aged persons; advising on contraception; immunizing family members when necessary; educating family members for better health; hygiene of housing. Family physicians may be solo-practitioners, but it is better to have teams of physicians and nurses. This is desirable not only for increasing the efficiency and effectiveness of the service, but also for teaching both medical and nursing students in the same environment. It should be noted here that this partnership is indispensable in countries where the number of physicians is limited. Nurses in such teams should function as public health nurses and do home visiting. In addition to nursing services they may carry out periodic examinations of children, pregnant women and aged persons, in order to separate the normal cases from potentially complicated ones, which should be referred to physicians. The physicians in charge of running centres associated with medical schools should be under the coordination of a department such as the department of social and preventive medicine but in addition, their work should be coordinated with the clinical departments in order to maintain a satisfactory quality of medical care.

Instructors who work as family physicians, nurses and other associated professionals can contribute to teaching the new features of health practice, but they cannot teach enough about the existing health care system of their countries. Therefore, schools should arrange for the involvement of local officials to familiarize students with the realities and limitations of presently available community services.

Specialized centres and dispensaries may also be used for training students. MCH centres providing family planning and both preventive and curative services are especially useful because of their comprehensive approach. Training in disease oriented centres may give students a limited view of health care.

SOME PRINCIPLES FOR FIELD TRAINING

1. The basic principle for the field training of students should be to get their active participation in routine work. Students attending centres only as observers cannot be trained satisfactorily. The work of the students should begin under close supervision of instructors. However, they should be allowed to act more independently during later periods of their field study.

2. The standard of medical practice should be maintained high enough to satisfy students. To employ students at crowded and poorly staffed centres causes more harm than good. These students are discouraged from working in such centres after their graduation.

3. The health records of persons who are served by the centre should be well kept. Detailed morbidity and mortality statistics for the area should be available to students.

4. The instructors should be responsible both for delivering health care to the people and for training students. Their work should permit them to allocate enough time for teaching.

5. The student/instructor ratio is crucial in field training. The number of students per instructor at a given time should desirably be 2 or 3.

6. The duration of field training is also important. It should provide for at least 2 months of in depth practice. Otherwise, it will be difficult for students to become competent in the wide range of understanding and skills needed for practice in the community.

ANNEX XIV

CRITERIA FOR SELECTION OF FIELD TRAINING AREAS TO SUPPORT TRAINING INSTITUTIONS

BY
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INTRODUCTION

Medical education must become more practical and thus requires the provision of opportunities to practise. For basic science students in biology, chemistry and physics an exposure to laboratory work is necessary. For proper orientation in clinical medicine students need ample opportunity to learn to be practitioners by examining cases in the hospital or out-patient services. Equally important is the exposure of students of community medicine to field training to deal with the total problems of peoples and to learn to work in a team.

As the need for FTAs with particular emphasis on family health care (covering MCH and family planning) has become more widely appreciated for all categories of health personnel, it has become evident that both a pre-service orientation and continuous in-service training are equally necessary. It seems better to start by training each category of health worker separately on intensive basis, but later in pre-service training there should be opportunities to work as part of a team to build up the understanding and skills to work effectively in leadership and membership of a team.

In setting criteria for selecting FTAs as part of training institutions, some variation must be expected to accommodate certain local conditions. Continuous evaluations of output by reports of the performance and effectiveness of trainees and by giving due consideration to direct feedback from trainees at all levels should provide for continuous betterment and development of FTAs.

1. BASIC REQUIREMENT FOR FTA PROGRAMMES

1.1 There must be a good rapport with:

1.1.1 Local public health department - through:

(a) action research programme to serve the purpose of upgrading the health services as a model for the rest of the country;

(b) providing pre-service and in-service training opportunities for local health personnel of all categories (administrative, physicians, nursing auxiliary, etc.);

(c) entertaining actual involvement of senior public health personnel in field training activities, supervision and discussions;

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(d) incentives for all levels of public health personnel and auxiliaries to share in research, service and teaching activity.

1.1.2 Local, medical or public health institutions - through:

(a) applied field research touching on areas of interest to these institutions, data collection and research activities can be accomplished through well-supervised activity of trainees;

(b) providing training opportunities for undergraduate and post-graduate students and all levels of practitioners (interns, residents, demonstrators, young faculty and other paramedical groups);

(c) incentives for anybody who shares in field activities from the institutions.

1.1.3 Concerned national or international (United Nations) agencies - through:

(a) developing proposals and information to mobilize support especially to meet the great need for transportation, equipment and occasionally for experts or fellowships to prepare trainers;

(b) regular reporting of achievements and provisions for the exchange of experience.

1.2 There must be a strong general interest in the need for FTAs:

1.2.1 On the national level - to render support to field activities through:

(a) proper statutes and legislation supporting efforts of public health and medical institutions to provide field training,

(b) medical education and curriculum committees to plan for and evaluate all different aspects of education as they relate to field training;

(c) medical education workshops and seminars to propagate the idea and importance of field training;

(d) allocation of funds needed to support field training activities;

(e) arrangements whereby the state designates certain areas of the country, with appropriate geographical distribution, where field training activities are to be implemented;

(f) distributing resources for this activity so that they are not monopolized centrally;

(g) an effective team approach which is clearly demonstrated during the practical part of the field training;

(h) general acceptance of the principle that the old, strictly hospital-oriented teaching of medical students, nurses and all categories of health personnel is unrealistic for the preparation of personnel in developing countries.

1.2.2 On the international level - support to this activity could be provided through

(a) national, regional and inter-regional seminars and workshops on recent trends in education and training of the health team; such seminars should involve and stimulate young teachers from medical and public health institutions and the workshops

should be designed to enlist co-operation and produce awareness among senior teachers of innovations in education and training in various countries;

(b) follow-up of such seminars and workshops to ensure implementation;

(i) to seek out the educators who are promising enough to be encouraged in their local capacity and stimulated to further expansion of effort and innovation. In this respect and with due respect to national rights of nomination for workshops, it is recommended that the senior people who repeatedly appear in workshops but do not get seriously involved in the implementation of new ideas, in spite of their influence, should not be so consistently selected;

(ii) to find out local or national obstacles to the implementation of effective change in medical and public health education, and to try to overcome such hindrances through negotiations involving senior international personnel (such as Regional Advisers or Temporary Advisers).

(c) The most important next step is that national bodies should anticipate needs rather than wait for the emergence of demands or requests for help and support for the development of FTAs. Interested national personnel should be stimulated. This is especially important where the country is attempting to attend to its most urgent priorities, or where there is a tendency to centralized decision making. The policy should be continued of selecting promising institutions with interested personnel for regional short courses, scientific workshops and seminars for providing visiting experts. Such centres might be included in collaborative studies such as those which use research methods in family health and comprehensive health care.

Without support from the international level it might be difficult to maintain the morale of dedicated public health workers in some developing countries. If national support is insufficient, progress in the development of FTAs could be aborted because of a lack of local support and recognition.

2. SPECIFIC CRITERIA FOR SELECTING FTAs TO SUPPORT TRAINING INSTITUTIONS

2.1 Distance from the teaching institution should be within fifteen to twenty kilometres from the institution, or in time less than one hour. Access roads should be passable for regular vehicles. This should allow better utilization of FTA for regular visits and for supervision.

2.2 Size of FTA should be large enough to accommodate a phased plan of teaching and health services research extending over five to ten years. It is not necessary that the terrain covered by FTA be extensive but that the localities or dwelling units (like villages or hellas etc.) should provide a good statistical distribution. This will permit shifting training activities at times from one place to another and thus will provide the benefit of new experiences for both the trainees and the population.

3. Socio-economic characteristics of the population should represent the majority of the people in the region where the institution lies. Agrarian, rather than industrial and lower and middle socio-economic classes usually provide the best local support.

4. Demographic characteristics - rural rather than urban populations seem most appropriate for developing countries because they are representative of the country. They also tend to need FTA activity most acutely especially where birth rates and infant mortality are still high. The more stable the population the better for the continuity of longitudinal research studies in the FTA which may be extended for five to ten years.

5. To ensure programme-oriented field training, an FTA should be the site of on-going action research on the development of maternal and child health/family planning services.

As a minimum, careful evaluation should be done of the basic health services that are developed together with other sectoral activities.

6. Physical facilities for rendering good service as well as for housing trainees for resident programmes should be reasonably good. If working arrangements and the hostel facilities for the residence of trainees are in sharp contrast to their regular life experience, this could reflect on the whole group's attitude. Not only would productivity be affected but major inconveniences might produce antagonism towards service in rural areas

ANNEX XV

SUPPORT TO AND UTILIZATION OF FIELD TRAINING AREAS WITHIN A COUNTRY

(and as an inter-country facility)

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Support to and Utilization of Field Training Areas Within a Country (and as an inter-country facility)

Since WHO started its worldwide activities one of its main continuing objectives has been to promote a massive reorientation in medical education emphasizing the transition to preventive and social medicine and to community medicine. This new orientation must be based on community-side teaching which requires as great an internal revolution in medical education as Osler's introduction of bedside teaching. The field training area then should become equivalent to the teaching hospital with its teaching wards and laboratories.

Perhaps the earliest such effort was by one of my personal Gurus, John Grant, who started a field training area, in cooperation with James Yen, for medical students from Peking Union Medical College.[1] In 1934, he wrote the following: "The solution of this latter problem (training centers) indicates an important responsibility of the Peking Union Medical College that places it as the apex of a medical system which reaches down and actually provides an efficient health protection for the village inhabitant within the limitations of his present backward economic conditions. however, such a vertical medical system cannot stand by itself unless it is integrated with other vertical social activities in a joint horizontal attack upon the problem of social reconstruction."[2] Then in 1940 after he moved to Calcutta and established the Singur field training area for the All-India Institute of Hygiene and Public Health, John Grant made the following comment. "Social background and its relation to public health and disease constitutes no part of medical education as yet, although it is now obvious that it should, as much as bacteriology or surgery. Perusal of the dicta in the past two decades, emanating from such organizations as the General Medical Council of Great Britain or the association of American Medical Colleges reveals that the major recommendation is the necessity to incorporate in the medical curriculum the preventive and public health aspects of medical knowledge. So far the results of these recommendations are nominal not only because of the vested interests of the older-established subjects but because the recommendations have almost entirely ignored suggestions regarding the specific measures necessary for their implementation. This failure is due to the absence of social experience on the part of the present 'elder statesmen' of medical education who have reached their present senior positions without opportunity for personal experience in undertaking the principle they are recommending, although they can now see its importance. However, this failure seems inexplicable in the light of the prescription by the same body of adequate self-participative facilities for instruction in the pre-clinical and clinical branches of medicine. In fact, today acceptance has virtually been reached in regard to acceptable standards for such facilities. However, educators have not yet recognized that adequate facilities for training in public health to either the undergraduate or graduate student can be assured only on the same principle as that already followed up in pre-clinical and clinical instruction through the provision of opportunity for self-participative instruction in community fields under the control of teaching institutions."[3]

Experience since that time shows the repeated necessity for relearning the same lessons. The major difference that I see is that we have moved from the rare and isolated projects where visionary innovators were like "prophets crying in the wilderness" to a progressive and wide-spread mass movement. When I started the first medical college field training area on the Indian subcontinent in 1952,[4] I thought it would take at least 30 years to get general implementation.

It was, however, an idea whose time had come and by 1956 at the First All-India Congress on Medical Education it became a national policy that every medical college should have a field training area. The progress has been somewhat erratic but, with strong central government and international agency backing, more than half of the hundred medical colleges in India now have some sort of field training area. Their main purpose is to provide for a rural internship program.

Similarly, when I helped to organize the CENTO Conference on the Teaching of Preventive Medicine at Shiraz in 1961,[5] I visited most of the middle eastern medical colleges and found almost no involvement in field training. The developments since that time have been spotty but in general encouraging as is shown by a review of the situation in Turkey which was carried out last year by Rahmi Dirican[6] as a follow-up to our earlier and more detailed studies.[7] In some countries a critical mass of emphasis on rural training has been reached that should provide for self-sustaining growth. A major weakness is still to recruit and train teachers because there seem to be few new faculties coming along to replace the pioneers in this field. Throughout these years a major stimulus to progress has been provided by WHO meetings, consultations and seminars.

The sections which follow deal with specific aspects of community-side training which need particular attention.

A. Building a Data Base for Field Training Areas

Without data community-side teaching is purely an art and not a science. Just as the good clinical educator bases much of his formal teaching on quantitative data about patients, the community teacher needs data in order to communicate an understanding of what is really going on in the community. We cannot wait for the development of intuitive judgment from experience if either the clinical or the community health approach is to become truly scientific. Epidemiological information relating to health status is equivalent to bacteriological and biochemical findings in individuals. Simple measures of temperature, pulse and respirations give a general indication of the health status of the individual patient and similarly vital rates relating to births, deaths and morbidity provide continuing simple indications of the health of the community patient.

A serious difficulty is the need to be selective in data collection and to separate those items which should be routinely gathered from those which should be limited to special studies. A broad data base will permit easy access for survey purposes by providing a statistical base so that appropriate sampling frames can be readily drawn.

One of the major objectives of a field practice area should be to serve as a place where health services research can be undertaken on innovative approaches to the development and improvement of rural health programs. In our emphasis on the teaching aspects of field training areas we often ignore the equally important potential for research. In order to get clinical and laboratory oriented educators involved in the field training area, perhaps the most successful motivating force is to provide them with convenient opportunities for research. Everyone agrees that medical colleges should do research relevant to the needs of the populations they serve and it has become evident that there is no way of doing this which is as direct and effective as

basing field research in a community study. The data system for the field training area should be organized so as to be conducive to research efforts without being trapped into becoming totally subservient to them. Even more dangerous is the common practice of trying to continue data gathering which has been started as part of research but which is far too sophisticated for routine activities.

A well-known weakness of statistical systems is that they collect so much junk. Tradition and habit, along with borrowed forms, maintain a flow of irrelevant and redundant numbers which make it difficult to sort out truly meaningful data. To start with, the burden of excessive form-filling may cause outright fabrication or, at the best, rushed estimation in the peripheral units where the data start. Excessive flow through the information system means that, not only are the data not trusted, but they are not even looked at. Good planning requires early attention to eliminate from the information system all items not related to defined objectives and functional use.

For the field practice area, data needs customarily start with demographic information. The basic unit of health care information is obviously the number of people to be served and their distribution. Because of the rapid rate of population growth in most developing countries, it is particularly essential to have as accurate population projections as possible.

A second category of information is epidemiological, specifically information on the frequency and distribution of major health problems. In developing countries, this is often very spotty. Because of the chronic difficulty of getting accurate continuing reporting of mortality and morbidity information, an immediate need is often times to start by organizing some sort of sample survey. Certainly the selectivity inherent in hospital or other institutional reports of disease makes them only minimally useful for epidemiological information and this enhances the value of data collected at community level.

In many places the most serious deficiencies of information systems are in economic data. Most health people have little idea of what sort of information might be useful for economic analysis. The simplest type of information is usually accurate cost accounting of specific health activities. Many of the measurements of items which would be useful in economic analysis, especially of the cost-benefit type, have still to be developed so that methodological research is needed.

Another category of information which should be specially developed for educational purposes concerns the utilization of facilities and the functional patterns of work of various types of personnel. A recent international study shows remarkable uniformity in utilization of physicians but not other parameters of health care in twelve localities under dissimilar health care systems.[8] The most dramatic short term improvements in health care delivery can be made by increasing efficiency of utilization. This requires careful attention to the process of setting work standards and performance budgeting. Without an adequate data system, such rationalization

of the services is obviously impossible. A related type of information is basic administrative data on the availability and future projections of both manpower and facility resources. Data requirements for improving services fall into two categories. First are the initial or periodic surveys used to identify gaps, potential program interrelations, or causal linkages relating to motivations, practice, etc. Second is the more limited administrative information collected routinely to maintain quality control and evaluation of continuing services, with emphasis on the number and distribution of those serviced, where, by whom, for what, and with beginning information on public satisfaction and outcome.

An unfortunate feature of most efforts to improve data systems is that they often just add new items without cutting existing data flows. Information systems need a mechanism for killing forms to compensate for hyperfertile production of new forms. Records and forms seem to develop lives of their own, with no one being willing to kill a form. The longer a form has persisted, the greater this protectionism becomes as administrators begin to feel that surely 30 years of files must be useful to someone. Many forms are now being used that originated from research interests. While it may be reasonable at early stages in program development to use some research oriented data gathering, a continuing danger is that research data should not get built too deeply into routine forms.

B. Coordination of Field Training with Intramural Training

Medical specialities are generally defined either according to the group of people they serve or by the type of activity and skills which occupy the professionals' time. Community medicine can be separately identified on both scales.

The patient in community medicine is obviously the community. The community is composed of individuals just as a forest is composed of trees but it has its own special characteristics. A woman is either pregnant or not pregnant but most communities are always about 3 percent pregnant. Similarly the illnesses of communities must be studied within their ecological setting. The gestalt of the whole community brings an understanding that is quite different from seeing separate individuals as patients. Concern for the individual need not be lost in the process but each person is seen in relation to the group. Health care becomes more than a mere manipulation of the inner functions of individuals and focusses much more on the conditions which surround him. The fundamental and preventable causes of illness are usually community determinants.

To apply community health care a doctor needs special knowledge, skills and attitudes. Traditional medical education does not provide this understanding and practice. It is unreasonable to expect even a mature physician after many years of practice to pick up these spontaneously. The basic sciences of community medicine continue to be largely ignored. Even more important there are special skills of diagnosis and health care which need to be developed with as much precision and care as present specialist training in wards and operating theaters. Most critical are a group of ethical standards that can now be defined, which call for basic modifications in the values and attitudes of the doctor who undertakes community responsibilities.

The following section gives more detail on the knowledge, skills and attitudes which are needed. The discussion is not intended to be inclusive. It is selective in the sense that an attempt is made to give priority to particular emphases which seem important today.

1. Basic Sciences of Community Medicine

One of the early and most important decisions in curriculum planning for community medicine is that teaching should extend from the beginning of the medical course through the internship. With the progressive maturation of the concept of community medicine it is even more important to restate this principle and to clearly define what it means. The basic sciences of community medicine must be built into the preclinical curriculum along with the basic sciences of clinical medicine. The relative emphasis on the following specific disciplines and their timing needs to be adjusted to local conditions.

a. The general term covering the basic orientation that needs to be developed is ecology. Although this discipline had its roots in plant and animal studies the present need is to make it truly relevant to understanding of the human condition. As the study of the relationship between man and his environment it provides a good base for the rest of medicine.

b. Equally fundamental are the group of disciplines usually included in the social and behavioral sciences. Selective and relevant contributions to understanding the organization of man in groups and interactions between individuals are fundamental because other people are the dominant component of the environment of most individuals.

c. Statistics provides a quantitative base for community understanding and should make community medicine a more scientific and less intuitive discipline than most kinds of medical practice.

d. Epidemiology is the diagnostic discipline of community medicine. It is ecology applied to health problems. It can be practiced at the level of the family just as effectively as with larger communities. Epidemiological information provides the basis for much of the intuitive approach of the highly skilled clinical diagnostician. Expectations of when to look for particular combinations of health variables and their outcomes derive largely from awareness of probabilities in particular community groupings. Certain types of people come down with particular conditions and clinical ambiguities are often resolved best on the basis of knowing what to expect according to the epidemiological triad of time, place and person.

e. Demography is an increasingly important basic science in medical education. Rapid population growth appears to be the spontaneous factor most directly controlling change and development in many developing countries today. All health variables are directly influenced by the numbers of people. The medical profession must perceive its own responsibility for birth rates in addition to its traditional concern with death rates.

f. Genetics, Nutrition and Child Growth and Development provide understanding of the person. Each is controlled by varying environmental determinants. They are worth studying independently because they mediate the more general environmental forces.

C. Applied Sciences of Community Medicine

On a foundation of understanding the disciplines of community medicine it is necessary in the clinical years to develop a broad understanding of community forces and appropriate skills through practice. Much of this understanding and many of these community skills should be applied routinely in clinical practice. To properly care for people the doctor should incorporate social and preventive measures in individual patient care. He must, however, also learn to deal with the community as a whole because a group approach is often most efficient, economical and humane. In looking for solutions he must balance approaches directed to the individual, the family and the community.

1. Administration of health care has grown rapidly in importance. Partly as a result of demographic change and the increasing complexity of society there is a general insistence on better organization. In fact in some countries health care now ranks as the fourth largest industry in its requirements for manpower and money. As people insist on better organization doctors must either take leadership or find themselves controlled by administrators and politicians. Of particular interest is the great growth of administrative research exploring areas that were previously left to ad hoc and intuitive decisions. Not only must medical colleges begin to provide opportunities for doctors to learn health administration but they must also take leadership in research in health systems.

2. The doctor is the leader of the health team. No other aspect of medical education has been so much left to chance as preparing the doctor to work with health colleagues. In a health center he may be responsible for 40 co-workers and the number grows every year. This change is even more dramatic than the parallel movements in hospitals for more and more responsibilities to be carried by auxiliaries - a change that is forced by the increasing technocracy of medicine. To be a team leader requires a drastic change from outdated concepts of solo-practice. Learning the new role requires a chance to practice in a field setting where the young doctor begins to understand that there are many tasks, including clinical functions of medical care, which auxiliaries can do better than he can on a routine basis. He must learn to delegate down routine activities so that the complicated judgment problems can be referred up. Learning to work together with others requires practice.

3. Efficient referral is essential and a two-way relationship needs to be developed between the community physician and his health team. He must care for complicated clinical cases that are referred back to him from peripheral members of the team as a result of screening by standardized routines. Another pattern of referrals is needed for sociological and administrative problems. The additional prestige, authority and scientific arguments of the doctor might prove convincing in getting cooperation in problem families. Or he might have to shift from his own routine activities to handle a community outbreak or chronic high prevalence of a disease that requires epidemiological study.

4. Community control measures can now be applied on a widespread scale for many diseases. This is most true of the many basic preventive procedures that remove the causes of disease. In general these include public health functions such as sanitation, vector control, mass education and social and legal measures. Every doctor should be involved in community activities especially those which are applied at the personal level such as immunization and nutrition.

5. Family planning programs are here mentioned separately because of their vital role in building better health. Both community and individual approaches must be blended. The pressure is bound to increase because the population problem will not be easily solved. Some family planning experts are saying that one of the greatest obstacles to effective family planning programs is the medical profession. It is the responsibility of the leadership in medical colleges to disprove this indictment.

D. Basic Changes in Attitudes and Values

No combination of knowledge and skills will by themselves be sufficient preparation for the practice of community medicine. Both must be supplemented by a changed attitude, a modified set of values that goes beyond that usually associated with medical ethics.

When a doctor takes on the responsibility of caring for a community as his patient he has to change his understanding of his primary responsibility. He can no longer think in terms of doing everything possible for the few selected individuals who spontaneously come to him. He must learn to apply an appropriate scale of priorities to the choice of health problems which most require the balanced attention of the health team. He must also learn to think in terms of cost/benefit ratios in judging what control measures to apply. This requires a judicious amount of apparently ruthless saying "no" by the doctor to individuals who present themselves for symptomatic care of minor complaints which should normally be treated by auxiliaries. Rather than only treating complaints that spontaneously flow in centripetally, the whole health team reaches out centrifugally to the community in continuing appraisal of relevant problems. The community doctor must reserve his facilities and attention for those health problems which he and the community select as having the highest priority. There will never be enough resources to care for all health demands and rational allocation requires moral courage and much skill in public relations.

The community doctor gets his satisfaction less directly and overtly than the clinician. The results of his efforts are often deferred in time. Patient response is not usually direct and openly warm because prevention does not evoke gratitude as readily as removing pain from or fear of illness. Doctors must learn to think beyond the immediate gratifications of clinical care to a whole new value system in which his reward can be in the recognition that long term health improvements are slowly permeating the whole community.

Another basic attitude growing out of the ecological view is the recognition that medical care is not always the greatest need of a community. Health benefits may be better achieved by non-health developments. The doctor may therefore promote the greatest health gains by participating in non-medical measures.

E. Organization of Learning Opportunities in Field Training

Areas

For many years I worked on the principle that a good program in a health center serving a small cluster of villages was sufficient to provide field experience for medical students. This is adequate for an orientation primarily in clinical preventive medicine and family medicine. For community medicine, however, a larger field practice area is necessary.

A fundamental philosophical point is whether this field practice training center should be limited to facilities and arrangements which the young doctor will have to work with in an ordinary service health center or whether arrangements should be more elaborated and designed for teaching. My experience leads me strongly to the conviction that there should be as much difference between the training center and the ordinary service center as there is between the teaching hospital and the ordinary service hospital. We must show the right way of practicing community medicine. Then a graded experience can be provided so that after having worked in a good training center the young doctor or medical student spends some time in the real life situation of a more typical primary health center.

A general problem in using field training areas is to learn how to use the whole health system to create an environment for learning. Because of its importance it is worth reiterating that the doctor especially needs to learn the skills of working with other members of the health team. This can be done only if he can be fitted into field situations where he can experience the doctor's role in relation to the whole range of paramedical and auxiliary workers. What we have done in the past has been to toss medical students into a village environment where there were essentially no services and have expected them to learn how to function on their own. By analogy, this is really like undertaking hospital teaching in a situation where patients have been lined up in beds in a large room but with no services for nursing, laboratory, X-ray, diet or any of the other services needed in hospital care. Until we provide a complete range of services we should be cautious about using field practice areas for anything other than surveys or family studies.

A new appraisal of health team roles is necessary. In trying to look at these problems scientifically we have found ourselves being constantly trapped by professional stereotypes. For instance, when someone says "nurse" or "doctor" we have an immediate image spring to mind and assume that a nurse is a nurse and a doctor is a doctor. However, in manpower studies in Turkey[9] and Nigeria[10] we found that in Turkey there are about six doctors to every nurse, whereas in Nigeria there are about six nurses to every doctor and another six equivalently trained midwives giving a ratio of twelve to one. Obviously, for either system to function, the doctors in Turkey perform many nurses's functions by supervising untrained hastabakici (ward helpers). In Nigeria, by contrast, nurses perform many traditional doctor functions by conducting solo practice in peripheral clinics. Depending on the local conditions of the country, it is absolutely essential, therefore, to work out an appropriate balance of roles but in doing this it has been almost impossible to shed our intellectual stereotypes and reassign roles as long as we have continued to think primarily in terms of jealously protected professional titles and personnel categories. To get out of the dilemma of falling into the traditional ruts of thinking about professional stereotypes we developed a new methodology of functional analysis.[11] By thinking primarily in terms of functions we cut across the patterns of job distribution from another dimension and then could really look at what needs to be done first and only then begin to worry about who should perform those tasks.

In our research at the Narangwal Rural Health Research Center after developing the functional analysis methodology, we then went into the field with an action research program to evolve new job distributions based on the

redefined functional roles. Over a period of about four years we tried out various combinations and permutations of role reallocation specifically to integrate MCH, family planning and nutrition. We now have a Narangwal pattern that seems to work[12] and have defined with more precision the routine which can be carried out in practice by each health team member. These routines are incorporated into standing orders and training manuals. As these are defined, they can form a while new rationalized basis for setting up local adaptations of educational systems based on a clear picture of what the various members of the health center team should do. This package of services is ready to be applied selectively in demonstration projects at a level of cost and personnel input that can be generally introduced in health services.

The basic principle that we used in defining the family health worker's tasks was to say that any function that can be routinized is an appropriate job for these auxiliaries, while any activity that requires judgment in more complex decision-making or specialized technical skills should be referred to professionals. Doctors have traditionally assumed that curative work was a specific responsibility that could be performed only by themselves, while preventive work could be delegated or relegated to auxiliaries. Our experience in working out routines shows, however, that this relationship has to be turned upside down.

Over 90% of illnesses can be cared for by what Osler called "penny in the slot" routines. Auxiliaries can learn the sequence that when they find one, two and three, then they do four. With modern broad spectrum and relatively safe treatments, less than 10% of illnesses at family level require careful analysis, weighing of alternatives and sophisticated diagnostic and therapeutic skills. This is what makes general practice boring, even though it may be lucrative. On the other hand, preventive work may require some highly sophisticated decision making. A home visit to change a mother's practices in feeding her children requires a flexible educational approach adjusted to the realities of the home situation. A rational health care system is impossible if doctors feel they must continue to hold rigidly to the distorted ethical principle that they must see every patient because of some mystical doctor-patient relationship. Treatments given by auxiliaries must be kept simple and safe, but they should also be effective rather than just palliative. The field training area provides opportunities for all members of the health team to work together while they are students and with mature practitioners representing all categories of personnel.

A major reason for organizing a field training area to cover a reasonably large population is that it reduces the problems of "population fatigue" when a field center becomes saturated or overused. If work is done only in a small cluster of villages most families get tired of too many surveys and learning visits although some will enjoy participating in the teaching. They may not get services which properly compensate them for the bother of participating in teaching exercises. If the population covered is a whole health administration area then the study populations can be rotated. This also applies to research projects where great benefits can be achieved from comparing adjacent areas. The additional effort in logistics and organization is more than compensated for by the benefits of having a natural administrative unit affiliated to the educational institution. This is especially true because of complications introduced for both health administrators and educators when services are fragmented or shared.

Arranging Team Supervision

The concept of supervision needs to be emphasized in two ways. First, there is a need that a faculty team be designated to supervise jointly the work within the field training area. Secondly, there is the ever more important concept of the need to demonstrate built-in supervisory relationships in the field service programs so that the young doctor can learn from practical experience how he himself should supervise a community team.

Perhaps the most important lesson that I learned from over 20 years of trying to promote rural community medicine in India is that we made a mistake at first in turning over all responsibility for health center teaching to departments of social and preventive medicine. Other departments then assumed little or no responsibility. With a certain amount of glee clinicians ridiculed the efforts of social and preventive medicine teachers to change the orientation of students and made fun of the whole rural experience. After hearing derogatory comments about village service from clinical teachers who were their primary role models, most students naturally treated the whole rural experience in a casual and deprecatory way. The powerful socialization process of medical education imposes a professional value system that crystallizes a hierarchy of career goals in which a doctor is considered a success only if he works in sophisticated hospital practice or in lucrative private practice. He is considered a failure if he works in a health center or in community medicine.

The most encouraging emerging pattern in health care in many countries is that the best clinicians, and I really mean the best clinicians, are showing awareness and dissatisfaction with the present state of affairs and are increasingly becoming involved in community work. When a professor of medicine or of pediatrics is willing to go out once a month to conduct a clinic in a village community then community work automatically becomes respectable. It then seems appropriate for a young doctor to undertake such work especially if it is only for a few years in his total career development. In addition, it is invariably true that a clinician who goes into this sort of activity with the proper attitude will quickly find that he himself has much to learn about the realities of his country's health problems. If enough patients do not come for his fortnightly or monthly clinic he can profitably undertake walking tours in a neighbouring village with his students to follow up cases or just to visit homes.

This emphasis on clinical participation in health center teaching does not, however, reduce the need for the participation of a department of community medicine.[13] The most important learning experience in the health center is in working with the health team. the health center must therefore be well organized with the whole range of personnel working in a good functional relationship. This requires the expertise of community medicine specialists. Medical students, interns, nurses and other professional students can participate to learn how to work with all categories of staff.

Special emphasis is needed on learning how to supervise. The primary consideration in good supervision is that it should be educational and supportive rather than punitive. The hardest lesson for professionals to learn is how to handle any evidence that family health workers are trying to do more than they are trained to do. Regular visits make a great difference. Family health workers are more likely to keep to established routines if they are not going through an ego struggle in trying to prove that they are better than their supervisors seem to think. The most important source of support is to be careful that nothing is said in front of the village people that will shake the villager's confidence in the health worker. Corrections should not be made in front of villagers. Instead, all professionals must show respect for the family health worker's judgment. Peripheral workers will come to appreciate the periodic visits of supervisors if a real bond is established which helps to keep them from feeling isolated. Because of the almost inevitable feeling of isolation for almost anyone involved in rural work it is extremely important to have a sound program of continuing education. The practice of bringing all village workers together for one day every week, or every month, has proved to be especially effective. The subcenters are closed for this day and all peripheral staff come together for formal seminar work, to share experiences, to talk about their difficulties and to collect supplies. These service seminars should be in addition to regular teaching exercises for students.

G. Assessment of Trainees' Field Experience

A book is in press describing a five-year study to assess the impact of rural internship programs in seven medical colleges distributed all over India[14]. This was a research project that devoted considerable attention to developing methods of assessment.

For the practical day-to-day assessment of trainees in their routine activities, we tried a variety of approaches. Early in the program an effort was made to get the trainees to write a daily diary describing their experiences. This diary was then turned in at the end of the training program and efforts were made to evaluate its contents. The diaries made fascinating reading for instructors and often times insights were provided that helped to improve the services and teaching. It did not, however, seem to be a valid means of evaluation of work because it mainly measured literary style and journalistic skill.

Many efforts have been made to standardize various reporting devices. Perhaps the most common field practice teaching device has been to assign one or two families to a trainee for detailed study over one or two years. An outline is provided to the student of the information to be gathered under headings that are worked out in an orientation which is parallel to the history and physical examination of clinical investigations. Some of the headings that are usually included are: demographic data including a pregnancy history; socio-economic information, environmental information, some attention to health status of individuals; sources of health care and costs of care; etc. One approach that I have used is to require medical students to make 15 minute verbal presentations to a class in which they have had to end up the presentation with two lists on the board. One was a list of health and related problems in a priority rank as viewed by family members and the parallel list was of the family's health problems as ranked by the medical

student. This provided an excellent base for active discussion about potential action programs for doing something about getting some congruence between the two lists and this led naturally into educational implications for the family and what the student could, in fact, accomplish during his association with the family.

Similar project reports can be developed from community studies. Some of these projects as carried out in some U.S. medical schools have been extremely comprehensive and ambitious. They include analysis of statistical information derived either from available data or actual surveys plus attention to specific areas such as the utilization of curative and preventive services and the great gaps in coverage. Perhaps the most productive community surveys are ones that focus upon specific epidemiological problems. I have found that medical students can accomplish a great deal as part of an epidemiological team because of their tremendous energy and enthusiasm in projects as diverse as tracking down the location of fly breeding in a village (in this instance, cow dung cakes while drying), tuberculin and associated mycobacterial sensitivity prevalence, delivery practices among indigenous midwives (including potential opportunities for infection in neonatal tetanus), and a fascinating study of the history of factions in the social structure of a village and how this influenced utilization of health services. It is not uncommon to generate considerable feeling of social outrage as students find out what is really going on in the community and faculty members must be prepared to channel the energy that is generated into constructive channels.

Perhaps the most useful overall means of evaluating student performance in a field training activity is through what we have called a "supervisor's check list". This provides a framework for subjective but direct opinion based on observation and it gives fairly reliable results. Perhaps most important is the fact that in order to fill out such check lists the supervisors really have to get to know the trainees as individuals. This discipline has a most salutory effect on their involvement in field work and removes some of the anonymity which is both degrading to students and a primary barrier to learning. Annex 1 gives an example of such a supervisor's check that was developed for rural internship evaluation.

H. Assessment of Value of Field Training Areas

The five year research project on rural internships in India referred to above was a total assessment of multiple aspects of the program in field training areas.[15] It was started because there was a general disillusionment with the practicality of rural teaching and some feeling that such experiences were doing more harm than good. Students came back from their rural internships saying that the one thing they had learned was that they were never going back to the villages again. Clinical teachers especially felt that such experiences were not only a waste of time but that they led to the learning of bad habits.

Perhaps the most important result of this five year research project was to show that even a bad rural internship does a lot of good. It was apparent that just exposing young doctors to rural situations provided a tremendous learning experience even though they did not spontaneously appreciate its value.

Some of the specific findings that came out of the statistical analyses were

1. Doctors coming from a rural background expressed more preference for service in rural areas than those from an urban background. The young doctors from a rural background also rated higher in their preparation for rural work and they profited more from the rural training. A similar but somewhat less significant generalization emerged about doctors coming from the lower socio-economic groups.

2. Among the favourable factors influencing attraction to rural service the most important were the challenge of a comprehensive approach to health care and taking independent responsibility in situations of obvious need.

3. The most important unfavourable factors which deterred young doctors from choosing careers in rural service were deficiencies in professional working conditions with the highest priority being given to lack of drugs, supplies and equipment. Also ranked high were the lack of opportunities for augmenting professional preparation and difficulties in obtaining continuing education or maintaining professional contacts and associations.

4. Among the unfavourable factors affecting personal living in rural areas the most important was lack of educational opportunities for the children and isolation from urban facilities. These proved to be more important than pay and housing but those considerations were also important.

5. Interns in rural service do not recognize that a serious deterrent to effective health care was the problem of too heavy a curative load.

6. Field experience in rural programs had a favourable influence on interns' general attitude towards village people and work. Apparent negative attitudes might actually be better interpreted as being in the direction of developing a realistic understanding.

7. A marked ambivalence was found among interns ranging from a lack of confidence in their professional ability to a desire for the challenge of independent responsibility.

8. The educational objectives of the rural internship were poorly defined and inadequately communicated to interns who reported that their activities during internship were, in general, less worthwhile than they had anticipated.

9. Activities in the rural field experience which seemed most worthwhile to interns were learning to deal with·

a. practical health problems

b. villagers

c. colleagues

d. socio-economic factors in disease

10. Interns' suggestions for improving the teaching health centre activities were ranked in the following order:

a. improvement of their own living conditions

b. improved equipment and supplies

c. better planning and organization of the educational program

d. More emphasis on preventive work was a need especially recognized by those interns most interested in rural service.

Summary

I am convinced that it is wrong to train young doctors for sophisticated hospital practice and then throw them into a primary health center in the traditional manner of teaching a puppy how to swim. The excuse has been given that if students learn the best way of doing things they will later be able to make appropriate adaptations. This principle may be true when the gap between the teaching situation and eventual reality is not large. It breaks down completely when the gap is as wide as that between a teaching hospital and a rural or urban slum health center. It is wrong morally and educationally to subject a young doctor to the trauma of trying to make this adjustment on his own. The problems of learning how to live and work in villages or urban slums are so difficult and important that we need our best minds to work them out and it is the professors who should be in the vanguard of efforts to improve the health of the poor.

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ANNEX XVI

FIELD TRAINING AREAS

THE REPORT OF THE EGYPTIAN GROUP[1]

1. Objectives:

1.1 Broad objective: To contribute to health promotion and health care of the community through the preparation of better quality health personnel, oriented to local health problems and capable of fitting into a health team to provide total preventive curative health services to the community.

1.2 Specific objectives

1.2.1 Educational objectives

(a) To expose medical students, nurses and students in other health sciences to all aspects of health and disease in the community in order to identify the main health problems, their ecology and possible solutions; to gain ability in community diagnosis and an epidemiological approach; and to observe the interactions between man and his socio-cultural and physical environment.

(b) To come into contact with people in their natural setting, understand their culture, feel their needs and demands and learn how to communicate with them.

(c) To motivate students to have the interest and enthusiasm to serve the community and to develop a community perspective rather than an individual approach.

(d) To realize the importance of health education and how to impart it in order to achieve positive results.

(e) To appreciate the value of statistics and to learn proper methods for data collection, record-keeping and their uses.

(f) To learn about the administrative setting of the health care services, systems of referral and related services in the community.

(g) To practise total health care including: primary prevention, early diagnosis, primary medical care and continuing follow-up of care throughout life.

(h) To understand the factors affecting utilization of available services.

(i) To gain knowledge, favourable attitudes and appropriate skills in the fields of family planning, maternal care, child health, including growth and development, nutrition, immunization, health education, common health problems and how to deal with them.

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Dr (Mrs) L.M. Kamel - Member (Rapporteur)
Dr M. Moshtaghi - Observer (from Iran)
Dr N.H. Fisek - WHO Resource Person.

1.2.2 Research objectives

(a) To collect relevant data regarding demographic and social characteristics, morbidity and mortality statistics and epidemiological research. These data can also serve for teaching purposes.

(b) To provide teachers and students with convenient opportunities for community-based research.

(c) To use FTAs as a field for health service research to demonstrate better methods of delivering total health care efficiently within available resources.

1.2.3 Service objectives

(a) To provide a link between faculty members of clinical and community health departments.

(b) To improve the efficiency of available services in order to meet the needs of the people and by so doing to give an example to the relevant authorities of how to promote the quality of the services.

(c) To fill the gap between the community and the health centre by reaching out to homes in family visits.

2. Criteria

2.1 The population and health facilities in the area should be large enough to demonstrate to students the various aspects of health problems, within such an organizational structure that each student has the opportunity to participate in all health activities.

2.2 It should be close to the teaching institution and easily accessible to everybody participating in field training.

2.3 The main emphasis should be on rural areas, but this should not exclude the possibility of using urban centres as additional places for field training. Rural areas have the advantage of giving an opportunity to students to observe the community as a whole; in addition, rural people are usually those who need services most.

2.4 FTAs should represent as much as possible the different socio-economic and cultural groups in the country. If the area does not represent all the occupational groups, separate visits to the missing groups can be arranged.

2.5 FTAs should be run collaboratively by teaching faculties and health departments. However, the training institution should have the right to control the quality of the service as applied to the training of students.

2.6 Overcrowded and poorly staffed health centres are not appropriate for training students. Therefore, supplementation of staff, equipment and facilities should be such that the routine work and the training activities can both be achieved. The staff should also be specially selected and trained to carry out their functions properly.

3. Collection of statistical data

3.1 Birth, death and service statistics should be collected routinely by the health centre. Quality control of these data should be carried out.

3.2 Considering the importance of causes of death in planning and evaluating health activities, special emphasis should be laid on the accurate reporting of causes of death.

3.3 Special sampling surveys should be carried out to collect data on morbidity and other health problems. Cross-sectional and longitudinal surveys are needed for MCH, FP, KAP,etc.

3.4 Students should participate in the above-mentioned activities not only for training but also to improve the quality of data and to contribute to the knowledge of the status of community health and local problems. Their participation in sample surveys is important in teaching them the methodology of epidemiological studies.

4. Organization

4.1 Both observation and responsible participation by students are necessary in FTAs. Students should start by observations during their early years of education and gradually participate in actual activities during clerkship periods. Responsible participation under supervision should start at the level of internship.

4.2 Students can be involved in the health team approach by actual participation in field activities with all the staff of the health centre.

4.3 A prerequisite is to have a well-prepared and trained health officer and staff at the health centre to assist students to learn and to gain experience. Continuous education of the staff of the health centre should also be carried out.

4.4 To ensure the validity of the FTAs in students' education, the following methods of assessment may be taken into consideration: attitude tests before and after training periods observations of the performance of students in the field by the local staff and teachers; and evaluation of the reports written and the epidemiological studies carried out by the students.

5. Prerequisites to set up FTAs

A favourable attitude of teachers is perhaps the most essential prerequisite. The following prerequisites are also essential.

5.1 A sound contractual relationship between the university and the Ministry.

5.2 Good relations and co-operation between faculty members and the staff of the health centre.

5.3 The availability of facilities for standard medical care, teaching and research purposes.

5.4 The availability of transport at the FTA and between the school and FTA.

5.5 Proper funding and staffing of the health centres in the FTA.

5.6 Appropriate accommodation for trainees in the rural areas.

5.7 Interest of the staff of the health centre in teaching the students.

6. The main challenges in implementing FTAs

6.1 Competition between different agencies is one of the difficulties encountered in setting up and running FTAs properly.

6.2 Shortagesof funding, personnel and facilities always are bottlenecks in successful implementation of field training programmes.

6.3 A major problem is that the medical profession is not ready to accept the idea of collaborating with and transferring some of their clinical responsibility to auxiliary health personnel.

7. Field training areas: suggested programme for Egyptian medical schools and schools of health sciences

7.1 Background information

7.1.1 Present system of education

(a) Medical school education

After completing a preparatory year in the faculty of science students start their pre-clinical education.

Pre-clinical education

- 1st and 2nd years: Anatomy, Physiology, Biochemistry and Histology.
- 3rd year: Parasitology, Bacteriology, Pharmacology and Pathology.

Clinical education

4th and 5th years: Rotation in the various clinical departments. At this time they also have their courses in preventive medicine and forensic medicine.

Internship

One year of internship in which the graduate has to rotate among different clinical departments

(b) Nursing education

- High Institute of Nursing

  After completion of high school (twelve years' education) four years of lectures and clinical work are given. During the fourth year, they receive training in public health.

- Technical nursing institute

  Two years of nursing education after the high school

- Technical nursing high school

  Three years of education after preparatory school (nine years' education). They are given courses of public health during these study periods.

- School health visitors

  Three years' education after preparatory school prepares them to work as school health nurses.

- Assistant midwife school

  One and half year's education after preparatory school.

- Health Institute

  To prepare laboratory technicians, sanitarians, etc.

7.1.2 The health services available in Egypt

(a) Urban services include polyclinics, general hospitals, chest disease dispensaries and hospitals, other specialized hospitals, school health units and MCH centres.

(b) Rural health services: there are 2 190 rural health centres and units, i.e. 1 = 10 000 rural population. Each unit is responsible for curative treatment, endemic disease control, MCH, family planning, school health, supervision of environmental sanitation, record keeping and other functions of health services, such as vaccination, surveillance of contacts, observation of pilgrims, communicable disease control, etc. In other words, the health unit is practically responsible for comprehensive health care of the community. The staff serving in these units is composed of a physician, a nurse, assistant midwives, sanitarian, and/or health inspector, and/or clerk, laboratory assistant and workers.

7.2 The suggested programme for medical students

The teaching of the basic sciences for community medicine such as statistics, social sciences for medicine, public health and epidemiology should start from the first through the fourth year of medical education. Between the first and second years of medical education, students should be taken to the FTAs in the rural health centres during the summer vacation. Camping in the FTA is preferable because of the large numbers of students. At this stage of development, they can observe the work of the health centre as a whole with special reference to health education, data collection, vaccination, etc. One week of training is a suitable period. Between the third and fourth years, students should also participate in activities of FTAs with somewhat more responsibility compatible with their knowledge and experience. Two weeks of residence in the FTA would be helpful. During the fourth year of medical education, field training, visits and preferably accommodation for residence in field training areas for seven to fifteen days should be made an important part of their programme in public health.

Internship: At least one month of the one-year internship should be spent completely in health centres organized and run on standards conforming with the above-mentioned criteria. About six or seven interns can be attached to a health centre. During this month of practice, the intern should be assigned to the different functions of a medical officer in rotation. Supervision by the health officer and staff members of the centre should be supplemented by the faculty.

7.3 The suggested programme for students of health science

More emphasis should be laid on the teaching of community health in the curricula of different schools of health sciences. During the final year of their education they should spend one month in FTAs. During their stay in the field, collaboration between the various health professions should be emphasized.

ANNEX XVII

FIELD TRAINING AREAS
THE REPORT OF THE IRANIAN GROUP[1]

OBJECTIVES*

To provide an opportunity for the learner to gain knowledge, understanding, and skill to render community services in relation to the specific health needs of the community. Since the population of Iran is mainly rural and semi-urban, the FTA should represent these areas.

These objectives can be further subdivided as follows:

I. Knowledge

A. To identify:

1. Problems related to MCH.
2. Problems related to fertility and mortality.
3. Community resources.
4. Various administrative systems of health services.
5. Prevalent diseases among mothers and infants.
6. Factors (socio-economic, attitudinal, logistic) affecting the utilization of MCH and FP services.

II Attitude

A. To develop:

1. Interest in the importance of family health.
2. Interest in the preventive aspects rather than the curative aspects of diseases.
3. Awareness of the importance of family structure and its relation to MCH practice.
4. Humanitarian attitudes in regard to mothers and children.

III Skill

A. To develop skills in:

1. Delivering proper care to mothers during pregnancy, labour, delivery, and post-partum periods.
2. Administering different methods of FP programmes and procedures.
3. Administering appropriate non-surgical care for children from birth through school age.

IV Research objective

The FTA should provide an opportunity for the performance of operational and epidemiological research by students and faculty.

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[2] These objectives are for the field training of all medical and paramedical students, but the term medical students was used throughout for convenience.

V Service objective

The FTA should meet the needs of the community for MCH and FP.

CRITERIA FOR FTA

(a) Size

The FTA should be located in an area serving at least 10 - 30 thousand people.

(b) Distance

Approximately one hour's travelling time from the training institution.

(c) Representativeness

The FTA should embrace a population that is socio-economically and ethnically representative.

(d) Existing Health Centres should be utilized for the FTA. If necessary further equipment and staffing can be supplemented.

(e) Data Requirements

1. Sample verification of the existing data relating to births, deaths, morbidity, etc., by medical students is desirable.

2. Students should be encouraged to take a census of a small community and identify and study the percentage of mothers in the reproductive age group and children in the school age group.

3. If time allows, the infant mortality rate in the preceding year can be studied.

(f) Organization and sequence of Activities

1. Students should be required to deliver care to mothers and children actively and be directly engaged in prescribing FP advice to clients.

2. Job descriptions of every member of the health team should be clarified.

3. Students should be assigned as a member of a team with specific functions clearly interrelated with the functions of the other members.

4. The learner should be encouraged to accept referrals from the lowest level (Khane Behdasht) and to attempt to solve these problems in collaboration with other team members and then to refer complicated cases to district hospitals. The student should be encouraged to learn about various levels of health care and their deployment.

5. The student can be required to evaluate his own functional learning in relation to his own and the faculty's educational objectives.

(g) Prerequisites and policies

1. The first need is to change national policy, so that each student is required to have some field orientation. Medical school teachers in turn will have to be oriented through workshops and the establishment of institutional policy by the curriculum committee and other institutional authorities.

2. The FTA programme should start early in the educational programme and should make use of students' humanitarian attitudes and motivation at that stage.

3. In selection of students, priority should be given to those from rural areas. Selection methods, such as careful interviewing for motivation and geographical quotas, should be considered in addition to grades.

4. Students should be obliged to return to work in their own community for a specified period after graduation.

5. In addition to faculty members, experienced field personnel should be used for teaching and supervision and should be appropriately recognized.

6. Attempts should be made to recruit residents for training in community health.

(h) An FTA should be included in the network of the health system to introduce innovations in services.

(i) Facilities in the FTA should be replicable throughout the nation for future deployment.

(j) Adequate transportation should be available.

CHALLENGES

1. Scientific skills should be developed to cope with the preventable diseases and these should include methods of surveillance. For example, Behvarz should spend their time in antenatal and post-natal care of mothers and should leave the normal deliveries to traditional midwives, so that their time is most effectively used. A surveillance system for high risk cases should be set up to ensure referral.

2. The final evaluation of students should be based on skills and attitudes rather than just on theoretical knowledge. This should encourage students to put more emphasis on practice rather than theory.

3. Community members should be involved in decision-making in order to gain their acceptance and assistance.

4. To avoid oversaturation, the number and size of the FTA's should be expanded in proportion to the number of learners.

5. To make field training stimulating and enjoyable the learner must be successful in the programme and see the beneficial results of his work.

ANNEX XVIII

FIELD TRAINING AREAS
THE REPORT OF THE PAKISTANI GROUP[1]

INTRODUCTION

About 70 per cent of the total population of Pakistan resides in rural areas which have little or no coverage of medical and health care for the following reasons·

1. Although there is wide recognition that it is desirable to meet the felt needs of rural people in a reasonable manner, no medical doctor who is trained in urban medical institutions seems to serve in a rural community.

2. The medical undergraduate throughout his training is not exposed to life in rural areas. Therefore he/she is not familiar with the health and disease patterns in rural communities.

3. The students while under training get used to sophisticated equipment and such diagnostic facilities as modern laboratory equipment, X -rays, EEG, ECG, etc. etc. which they do not expect to find in rural areas.

4. Medicines prescribed by their teachers during their training are sophisticated ones which they will not be able to prescribe and provide in health centres.

5. Students are not provided with suitable residential accommodation where they can peacefully spend their time after duty hours.

6. There is a lack of educational facilities for the children of staff members of the health centres.

7. The staff of health centres and dispensaries are not compensated in accordance with their counterparts in urban areas, and the attraction of private practice is much greater in urban areas than in rural areas.

Objectives

Bearing in mind the above felt needs and the training patterns of the health personnel the following objectives are considered helpful:

I LEARNING OBJECTIVES

(a) Knowledge

(i) To create an understanding in the students of the whole community and its problems.

(ii) To create an awareness in the student of the role of a family unit in the community.

(iii) To provide knowledge of preventive medicine to students.

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Dr S. Bano Agha - Member
Dr Shamin Qureshi - Member (Rapporteur)
Dr M.A. Ansari - WHO Resource Person
Dr Carl E. Taylor - WHO Resource Person

(b) Attitudes of all members of the health team

(i) To create concern in students for the family as a unit and the community as a whole rather than continuing to have exclusive concern for individuals.

(ii) To bring about change in the attitude of field workers by developing respect for their co-workers, avoiding personal jealousies amongst team members, and by changing status consciousness.

(c) Skills

1. (i) To equip students with such skills as will enable them to make community diagnoses.

(ii) To understand community organization to implement health measures.

2. To develop the skills for effective team work, including:

(i) a special realization of the role of other members of the team within the specified job description.

(ii) a sense of responsibility of each member of the team for his own job.

(iii) The ability to maintain smooth functioning of inter-personnel relationships as necessary.

II FACULTY OBJECTIVES

(a) To provide a mechanism for teacher orientation for community health.

(b) To enable the teachers to use the resources of Field Training Areas for research purposes e.g.

(i) Epidemiological research.
(ii) Other specific research; nutrition, child care and growth, family planning, etc.
(iii) Operations research.

III COMMUNITY OBJECTIVES

(i) To promote active participation of the local community in FTA health programmes.

(ii) To collaborate in order to obtain certain practical health benefits in accordance with the felt needs of the community by defining priorities.

IV HEALTH DEPARTMENT OBJECTIVES

1. To undertake studies of the existing health services, with a view to define deficiencies and gaps so as to plan and bring about improvements.

2. To undertake epidemiological surveys to define the frequency and distribution of common major health problems.

Criteria

Size of the population and area of FTA

- Based on past experiences of community services through rural health subcentres, it is proposed that an FTA cater to the needs of 40 - 60 000 population. The Government of

Pakistan has modified its plans for rural health programmes since it could not meet the requests of this size of community in an area of eight to ten sq. miles. The FTA should be ten to fifteen miles from the training institutions on the main road to overcome transport problems.

- It should serve a rural population engaged in agriculture.

- It should have a per capita income of about Rs 571 per annum.

The service is to be given co-operatively by the Government and training institutions. However, if there are other agencies in the areas collaborative relationship should be developed with them.

The supplementation of existing services depends upon what is available. The requirements of FTA's for meeting the training requirements of the students and the community needs should take priority.

Data Base

Community diagnoses are based on the collection and interpretation of relevant data such as:

(a) Age and sex distribution of the population by social groups.

(b) Birth rate, crude death rate, infant mortality rate, maternal mortality rate.

(c) Incidence, prevalence and attack rates of the most important diseases of the area.

The focus should be on identification of the basic health needs and health problems.

Organization and utilization of FTA's

There are fourteen medical colleges in Pakistan training about 3 900 students. The number of trainees has nearly doubled in the last two years to try to meet the demands of the population and to provide health care services in rural areas. Though this increase in number of medical trainees remains out of balance with the needs of other categories of health personnel required to provide health care, it is still by no means sufficient. The projected increase in numbers and manpower continues to be regulated by the resources of the country both in public and private sectors. Pakistan is hard pressed with its struggle for self-sufficiency within the meagre resources of funds, equipment, teachers and premises required for other training institutions.

Students in batches of ten to fifteen are to be taken by rotation to the field training areas once a week or every fifteen days. Two families are allotted to each student. On the first visit, all the family members are registered by the student and the family history is recorded. Subsequently, the student provides comprehensive health care service to all the members of the family while being supervised by the teaching staff of the training institutions. Primarily, this is the responsibility of the departments of preventive medicine but other members of the faculty also should be involved. The records of the students are examined and assessed at the end of two years of family visits.

The students are guided by the teachers of the preventive medicine department and also by paediatricians, gynaecologists and other members of the clinical faculty, who cover the MCH and family planning and primary care services at appropriate times. Complicated health problems are referred to the hospitals where physicians, surgeons, ophthalmologists give the necessary, secondary and tertiary care. At regular intervals, assessment of the skills acquired by students as recorded in students' reports are reviewed to determine the understanding of a community approach.

V PREREQUISITES FOR SETTING UP FTA'S

Other faculty members who are influential and tend to resist change will have to be converted by recommendations/suggestions from various national and international sources, preferably through the Pakistan Medical/Nursing councils. Primarily, leadership will be provided by the Department of Preventive Medicine. At present, persuasion through the Department of Preventive Medicine has resulted in acceptance of the change from working only in the premises of the institution to some community work. It is expected that through the recommendations and advisory services and assistance provided by WHO, the Government will be in a position to take positive steps in this direction. The Pakistan Medical/Nursing councils which set the standards for medical/nursing education in the country, respectively, will have to be consulted to have the educational programme modified.

A suitable scheme will have to be prepared requesting funds for implementation of the FTAs. Once the scheme is approved by the Government, suitable nearby field areas will be selected. Adequate and suitable staff for this programme will be made available by consultation between preventive medicine departments and the Government.

In one or two medical schools the students are already demanding that they participate in community health programmes. This awareness and demand has also to be created in other medical schools in the country. The preventive medicine department is in the best position to create this awareness in the medical faculties and student community and should take a lead in this direction.

Collaboration of all agencies functioning in the FTAs is desirable to make the programme a success.

In order to achieve this goal, adequate transport facilities will be required - assistance may have to be requested from international agencies.

VI CHALLENGES IN THE IMPLEMENTATION OF FTAS

Teachers in clinical departments after imparting training in hospital wards, should follow up in the FTA's and translate training into practical applications which are relevant to the community. Faculty members will have to chalk out a definite programme for this purpose in consultation with each other in order not to interfere with the rest of the training schedule of students.

In order to gain community confidence and acceptance, an integrated approach is recommended. After having gained the confidence of the community by meeting their medical care requirements, preventive aspects of public health can be more readily introduced.

To avoid community saturation problems, the following steps may be taken:

(i) Expand the size of FTA's whenever required, change the site, while at the same time meeting the requests of the previous area.

(ii) In order to avoid overlapping of visits and causing inconvenience to the community, it is suggested that all services be developed in a systematic and integrated form according to a time-table approved by the community. The students should gain satisfaction from the feeling that they have served humanity.

ANNEX XIX

FIELD TRAINING AREAS
REPORT OF THE SUDANESE GROUP[1]

I INTRODUCTION

The group recognizes the great need for developing field training areas for all health personnel but considering the existing situation in Sudan it is agreed that present plans should be framed to establish an FTA for the Faculty of Medicine. This can be used initially for training medical students, with the provision of teams of auxiliaries who will work as the ordinary staffing of a peripheral health unit. However, this is only an immediate objective, since the end objective will be to involve other categories of health personnel who will also receive their training side by side with medical students, thus deepening the concept of the team approach in community health work.

II OBJECTIVES

The overall objective is to orient medical students towards community work in rural areas and properly equip them for such service.

1. Knowledge objectives

Students must acquire some knowledge of the existing problems of rural communities; these include:

- Demographic patterns
- Socio-economic and cultural characteristics
- Health problems
- Environmental problems
- Administrative problems

After gaining some understanding of existing problems, students should also learn as much as possible about solutions to these problems.

However, it is desirable that as much of this knowledge as possible should be taught in the classroom before the student goes to the FTA so as to make maximum use of the time in the FTA.

2. Behavioural and attitudinal objectives

The student should develop a holistic approach to community problems which includes:

2.1 Awareness of the continuous spectrum from normal to abnormal.

2.2 Appreciation of the integrated approach to health problems rather than an approach which is limited to categorical subjects or specific clinical problems.

2.3 Understanding that continuity of care for the community should not be institution-based; rather it proceeds with the individual through the appropriate stages of referral to the highest referral hospital.

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2.4 The importance of continuity of care overtime for particular individuals as well as continuity of care for the whole community including arrangements for follow-up for any mass campaigns that are instituted.

2.5 Appreciation of the continuous spectrum of care provided by various health personnel starting from when an individual seeks primary care from front-line workers through the primary referral centres up to the highest stage of specialist referral.

3. Skills

3.1 The student must be able to master a number of technical skills needed for the implementation of solutions to problems which are defined in the community

3.2 Students must learn the job descriptions of each of the members of the health team and must be able to organize and co-ordinate the roles of the various personnel.

4. Service objectives

In the FTA it is necessary to deliver health services of acceptable quality to the people of the area, within the constraints of available health personnel and facilities, according to the priorities outlined by the Ministry of Health in the Country Health Programme.

5. Research objectives

5.1 Operational research will help to find the best ways of utilizing available resources.

5.2 It is desirable to monitor the community health status and continuously assess the priority of problems through epidemiological research.

5.3 Practical programme development will benefit from looking into the consumer side of health activities by assessing utilization of services.

III THE PREREQUISITES

For an FTA to function so as to attain the objectives outlined above it must meet some of the following prerequisites:

1. Consent and approval will have to be given by the University of Khartoum and the Ministry of Health as the parent organizations ultimately responsible for the administration of the FTA and its function.

2. Other organizations will have to be approached for the immediate or potential support which will be required for the proper functioning of the FTA:

- Ministry of Social Welfare
- National Council for Research
- Ministry of Local Government
- The Socialist Union
- Public Donations from individuals and organizations
- Ministry of Education
- WHO, UNICFF and other interested organizations.

3. Groups of people who are interested or potentially interested should be approached early. These include:

- The people of community to be selected
- The medical students
- The full-time and part-time staff who might be engaged in the field training and community education of medical students.

4. Personnel

The area to be selected must have adequate numbers and calibre of personnel to deliver the desired services and they should at the same time know how to give good learning opportunities to medical students. With the numbers of students we have now, at least eight to ten health centres will be needed. It may be desirable to start with four to six health centres in a defined rural area first and then later expand to include four to five more health centres in another rural or urban area. Each of these centres must have the full complement of auxiliary staff as stipulated by the Ministry of Health.

5. Structures

In the beginning no extra buildings will be needed but ultimately residential accommodation will be necessary for the students. This is particularly true for activities in the rural area where the housing can be in the form of improved village buildings acquired on lease or hire.

6. Transport

This is a vital item. Three minibuses and a Landrover are needed.

7. Equipment

The standard list of equipment of the Ministry of Health for such centres should be sufficient. All the existing equipment will be used and any deficiencies will be made up from outside resources.

8. The Ministry of Health and the University of Khartoum shall work out a contract for joint responsibility for the selection, employment and transfer of all health personnel including the rural hospital doctor.

IV CRITERIA FOR SELECTION OF FTA

1. The area should be within daily commuting distance of the medical school and it should be accessible all year round. It should however be sufficiently distant from Khartoum to qualify as a truly rural area (20 - 30 km).

2. The FTA should serve a population of 30 - 50 000 who are distributed among several agglomerations of varying sizes and accessibility.

3. The FTA should include the health facilities normally found at a district level, i.e. one rural hospital as the first level of referral care, and four to six health centres to provide primary care foci under the supervision of the rural hospital.

4. The health services should be run by the Ministry of Health with staff and equipment provided according to Ministry of Health standards.

5. The existing health services should serve as the organizational base for the FTA. Supplementary facilities should be provided for research or teaching purposes, but only if the research or teaching objectives cannot be adequately met elsewhere than in the FTA. This supplementation of resources should always be kept to a minimum and whenever possible it would be desirable to rely on locally available equipment and facilities.

V DATA BASE

1. The data available in the 1973 population census of Sudan can supply all the demographic information needed about the area.

2. It will be necessary to establish a system for continuing collecting of demographic data, especially births and deaths

3. Priority should be given to cross sectional surveys of the health of children under 5 years, mainly to gather information on nutritional and immunization status, together with simple laboratory investigations.

4. A longitudinal follow-up of pregnant women will be desirable, especially if it can include a KAP survey on child-bearing, child weaning and family planning.

5. Longitudinal surveys will also be desirable of children under five years to assess factors influencing growth and development.

6. Specific disease-oriented surveys for the collection of epidemiological data and, more important, for ranking priorities will be useful to guide the development of special programmes. Students can work in these surveys during their block of time in community medicine, child health or obstetrics, etc. During this time, they can go in small groups to the FTA with staff members to collect the data and they can also analyze their results separately. Ultimately all separate surveys should be compiled to provide a total picture of health conditions.

In subsequent stages of their training, students can be involved in the FTA on a residential basis. Among their assignments they can be expected:

to be responsible for families over a period of one to two years:

to deliver comprehensive service as part of the health team; to conduct special surveys to look into particular problems, to work out solutions for these problems and to implement these solutions, (e.g. scabies in village children).

A future extension of the area can be made in the following ways:

- another rural district of equivalent size
- an urban district of 4 - 6 health centres
- a slum area in the capital

VI ORGANIZATION AND SEQUENCE OF UTILIZATION

The development of the FTA is visualized as a staged programme. The involvement of the student in the first stage will have to be on a sessional non-residential basis. The reasons for this are:

- the present curriculum does not allow a complete block of time for any particular department;

- the need to work on the staff of the FTA during the initial period to achieve the required attitude changes which will serve as a good learning experience for the students;

- the final set-up of the FTA with provision of adequate facilities and equipment will take some time during which the students' involvement will be on a sessional basis.

During this stage the students' involvement will be:

1. Conducting the surveys mentioned and thus helping to define the existing problems as outlined in the objectives and rank the priorities in this area.

2. Part of the students' time will be spent in the delivery of the service to the community with the health personnel. At the same time an effort will be made to involve the health personnel in surveys.

3. The students will endeavour to analyze the surveys they carry out and evaluate the service they render.

VII SPECIFIC RECOMMENDATIONS

It is abundantly clear that need for the development of an FTA in this country is of paramount importance and pressing urgency. The group recommends the following:

1. It is recognized that WHO is taking great interest and exerting enthusiastic efforts in motivating the countries of the Region to establish FTAs. It is felt that WHO has a duty to continue these efforts, as specific opportunities arise, in the following ways:

1.1 Follow-up committees for this and other similar seminars should be set up.

1.2 Similar seminars should be held regularly in the countries of the Region.

1.3 WHO can arrange for consulting staff to visit individual countries to support and accelerate the development of FTAs.

1.4 Interested groups in countries should be given a chance to see a well-functioning FTA somewhere.

2. The prime responsibility for the development of successfully functioning FTAs at the preliminary stages should fall on the University which should shoulder its responsibility fully andshould rise to the immense challenge of establishing the FTA with a special sense of duty.

2.1 The curriculum committee of the faculty of medicine should give top priority to the FTA both in student time allocation and by the provision of required facilities and continuing support; also by providing encouragement for the staff undertaking this difficult task.

2.2 The Univ ersity should take the necessary steps to approach and co-operate with the Ministry of Health and the authorities to establish the FTA.

2.3 The Ministry, having the prime responsibility for providing health services to the community, and being the biggest benefactor from the expected good effects on graduates, and also since it is itself primarily responsible for thetraining of all auxiliary personnel, should assume equal responsibility for the establishment and running of the FTA.

3. It should also be pointed out that a very important cadre of health workers in the Sudan are the medical assistants and today their training institution has no FTA facilities. It is strongly believed that it is high time that the learning facilities of an FTA should be made available to them. Therefore, we recommend that, as soon as the FTA for the medical students is established and functioning satisfactorily, medical assistants under training should also be introduced to it and should team up with medical students in learning-service activity.

ANNEX XX

FIELD TRAINING AREAS
REPORT OF THE SYRIAN GROUP[1]

I INTRODUCTION

For the purposes of this report, it may help to give a brief outline of the general situation in Syria regarding health personnel and the health delivery system.

1. Physicians: There are three medical schools at the present time: in Damascus, Aleppo and Lattakia (the latter has not yet produced graduates). The total yearly output of graduates this year will be around 400. This figure is expected to triple at the end of this five-year period.

2. Nurses: There are fourteen existing nursing schools, one in each province and three in Damascus. Graduates from all these schools do not exceed 500 nurses per year. One of these schools, in Nast, is for males. There are no plans at present to increase the number of nursing graduates. The Ministry of Public Health has started two schools for practical nurses, and one of them has admitted students this year for the first time. There is therefore an acute shortage of nurses as reflected by an unbalanced physician/nurse ratio.

3. Health visitors: The only school for health visitors in Syria was suspended in 1968, but the possibility of reinstituting this training is being considered.

4. The MCH Division controlling MCH activities was suspended temporarily between 1972 and 1974. Since the Directorate of MCH has been reactivated it has started refresher courses for all the old graduates who will be working in MCH centres.

5. The Technical Health Institute: This institution is situated in Damascus and provides the health services with technicians in laboratory techniques, X-ray, anaesthesia, environmental health and pharmacy.

II THE OBJECTIVES OF AN FTA

(a) Learning objectives

From the point of view of students

- To acquire new data and information about rural communities and to understand the relative priority of different health problems affecting the community.

- To acquire knowledge about the shortcomings of present health services.

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- To accept service in rural areas willingly as a social responsibility for a period of time.

- To develop attitudes based on awareness of the advantages of preventive medicine and a broad approach to community problems.

- To develop skills in community leadership, maintaining proper doctor/community relationships and promoting mutual respect among the members of the health team.

From the point of view of the physician

- To create a positive attitude among clinical teachers toward the importance of work in field training areas so that they may identifv themselves with the health needs of their communities.

(b) Research objectives

- To provide public health officials with valid information about the occurrence and distribution of health problems and data on health manpower and resources which can be used for planning.

- There is a great opportunity for first-hand collection of research information bv students and their teachers.

(c) Service objectives

- This can be direct or indirect: developing innovating services can provide solutions to general health problems and at the same time the preparation in the FTA will improve the skill and attitude of the students from various disciplines who will work together in the health team. It is particularly important that within the FTA good quality services should be provided to satisfy the needs of the communities concerned.

III CRITERIA FOR THE SELECTION OF AN FTA IN SYRIA

(a) The size should be adequate to fulfil the needs of training for students from different disciplines. The population should be around 50 000 to 100 000, including a district town of not less than 20 000 people.

(b) The distance should not be more than 15 to 30 kms from the central teaching institution. The road should be reasonable and travel should not take more than thirty to forty minutes beyond the metropolitan boundaries.

(c) The area should be rural with a semi-urban central district town.

(d) The occupation of the majority of the people should be agrarian in line with the dominant population of the country. It is desirable that the area should be secluded in order to have a better recording system with the proper record linkage for all the catchment area of the district hospital with minimal confusion by inhabitants of other areas. The population should be of the upper low, or lower middle socio-economic class. However, if a co-operative upper middle class is found in an area, this will not be against the selection of this area as an FTA.

(e) Collaborative relationship between the training institution and the existing public health authorities is absolutely necessary for the success of the programme. The public health authority should be convinced:

- To accept in certain key positions within the functioning system of service in the FTA appropriate personnel from the teaching institution provided that they will be answerable to and follow the regulations of the Ministry of Public Health.

- To supplement existing facilities within the criteria allowed by the Ministry of Public Health, in other words leave no gaps in the infrastructure, equipment and drug supply in FTA.

IV DATA BASE

(a) The malaria eradication programme has provided basic data for geographic reconnaissance for the whole rural part of the country including sketch maps, the number of houses and lists of household heads.

(b) Data has to be collected through special surveys for which special forms and records should be prepared beforehand to serve satisfactorily the objectives of this activity.

(c) Students will be used from the various disciplines of the health team to collect data which is directly related to the background of each discipline.

(d) The temptation to collect redundant data must be avoided.

(e) No time constraints are envisaged since malaria eradication programme's simple basic data is available.

V ORGANIZATION AND SEQUENCE OF ACTIVITIES IN THE FTA

(a) Sub-groups or batches of forty to fifty could be accommodated at one time with allocation of a specified quota of work for each.

(b) Students can be involved by combining them with the other members of the team, with clear job specifications for each category.

(c) Exposure to the full range of health centre activities will be ensured by arranging for students to work in small groups and in rotation at the site of the various levels and types of health care.

(d) Students will have repeated assessment of their various activities and functions by allowing time for evaluation at each stage of their work. Evaluation of the programme will also lead to consistent efforts to replan continuously to achieve modification and refinement of learning experiences.

(e) The attitude of teachers is considered to be the most essential prerequisite for setting up an FTA. Students' attitude usually "but not always" follows the attitudes of respected faculty members. They can be moulded most readily if teaching starts early. No great difficulties should be encountered in arranging funds, personnel or organizational structure.

(f) Some contractual relationship must be worked out early between the teaching institutions and the Ministry of Public Health. The local health centre will be used. More premises will be added as the need arises. Transport problems can most probably be overcome.

VI THE MAIN CHALLENGES IN IMPLEMENTING AN FTA

(a) Adapting clinical and other scientific skills to the needs of rural populations will be the main challenge.

(b) Also of great importance are negotiations to gain acceptance for this experience to rank equally with clinical and laboratory experience at university hospital and science facilities but this should not be difficult with a good leadership. Some effort should be made to impress the body responsible for curriculum change and departmental status with the importance of the changes proposed.

(c) Sincerity and acceptable good behaviour on the part of faculty and students will help in gaining community acceptance.

(d) Problems in implementation can be prevented or corrected early by periodic evaluation.

(e) The main challenge in supporting good field work will be to maintain continued interest on the part of the teaching staff not only in the Department of Community Medicine but also in the clinical departments.