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WORLD HEALTH ORGANIZATION TECHNICAL REPORT SERIES

No. 156

EXPERT COMMITTEE ON TRAINING OF HEALTH PERSONNEL IN HEALTH EDUCATION OF THE PUBLIC

Report

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WORLD HEALTH ORGANIZATION

PALAIS DES NATIONS

GENEVA

1958

EXPERT COMMITTEE ON TRAINING OF HEALTH PERSONNEL IN HEALTH EDUCATION OF THE PUBLIC *

Geneva, 28 October-1 November 1957

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^{*} Invited but unable to attend:

EXPERT COMMITTEE ON TRAINING OF HEALTH PERSONNEL IN HEALTH EDUCATION OF THE PUBLIC

Report *

The Ninth World Health Assembly, held in May 1956, made provision for the convening of an Expert Committee on Training of Health Personnel in Health Education of the Public. The meeting of this Expert Committee was held in Geneva from 28 October to 1 November 1957.

Dr M. G. Candau, the Director-General of the World Health Organization, formally opened the session and welcomed the members of the Committee and the representatives from the United Nations Educational, Scientific and Cultural Organization (UNESCO). Dr. Candau stated that, while the need for preparing professional health workers for their health education work with individuals, families, and the general public has become recognized by many health authorities, a great deal needs to be done through studies, research and the development of training to ensure that the modern concepts and methods of health education become a more conscious and specific part of the health workers' daily activities.

Dr A. A. Zaki was elected Chairman of the Committee, and Dr John Burton, Rapporteur.

The Committee expressed great regret that because of illness Professor Jacques Parisot was unable to attend this meeting.

1. STATEMENT BY CHAIRMAN

Health education aims at promoting the greatest possible fulfilment of inherited powers of the body and mind, and the happy adjustment of the individual to society. It is the educational approach to health problems, and as such is concerned with practical measures for the promotion of health and the control and treatment of disease.

^{*} The Executive Board, at its twenty-second session, adopted the following resolution:
The Executive Board

^{1.} Notes the report of the Expert Committee on Training of Health Personnel in Health Education of the Public;

^{2.} THANKS the members of the Committee for their work; and

^{3.} AUTHORIZES publication of the report.

⁽Resolution EB22 R26, Off. Rec. Wld Hlth Org., 1958, 88, 11)

Health and disease depend on two factors, heredity and environment. Heredity determines what the individual could become: the interaction between this and the environment determines what the individual actually does become. Human knowledge and volition are the main factors in controlling the environment, and for this reason the quality of health education plays an important part in shaping the destiny of mankind.

The environment is of two kinds—physical and cultural. It is common knowledge that adverse physical conditions such as malnutrition and overcrowding impair health and retard development. Likewise an adverse cultural environment of ignorance, apathy and pessimism can demoralize behaviour and lead to a lack of responsibility in the individual towards his own health and that of others.

People all over the world, irrespective of their level of education and sophistication, have a common instinct for self-preservation which provides a strong motive to pursue health. In the past it has involved a long-drawn-out process of trial and error, of fear and hope, of reasoning and following example. Today, however, with the enormous opportunity implicit in the widespread availability and use of scientific knowledge, the attainment of a state of well-being rests upon personal resolve. Resolve depends on attitude, attitude upon insight and insight upon knowledge, experience and feeling. The methods of health education have developed with the specific aim of helping people to make choices about health more wisely.

Clinical medicine and public health are concerned with the manner in which sickness and conditions harmful to health arise, decline and are controlled. Human behaviour is always an important factor involved, and health education therefore draws on both the social and biological sciences, education and psychology.

Health education is not merely health propaganda or instruction. It aims at enabling the learner—"the consumer"—to make his own choices and decisions about health matters, and at providing experiences which will develop insight and understanding and facilitate individual action.

"The legitimate objective of governments is" as Abraham Lincoln said "to do for a community of people whatever they need to have done but cannot do at all or cannot do as well for themselves in their separate individual capacity."

2. INTRODUCTION

There is evidence that health education is an effective method in curative and preventive medicine, and the Committee recognizes that the need for preparing health workers in health education exists in all countries. A "standard" training programme cannot, however, be laid down. In fact, for the problem in question—as for many problems which are the subject

of international study—there is no single solution, no universal panacea. Nevertheless, from the evolution of ideas and facts, from acquired experience and from centralized documentation (in particular, surveys and reports emanating from national and international sources) certain concepts and guiding principles, of which the value lies in their convergence and universality, emerge as pointers for the organization or development of the work. Each country must formulate its own plans according to its particular needs, resources, and available technical services. Educational, economic, cultural and psychological factors, as well as varying patterns of local, provincial or state and national administration, will inevitably have an important bearing on the nature and scope of the training activities in health education most appropriate in various circumstances.

Health education is now widely recognized as one of the essential elements of health programmes, which usually depend, for practical results, on the active participation of a well-informed public. The Committee, however, stresses that training in health education should be integrated with other related training programmes concerned with wider aspects of community development.

While no standard programme is prescribed, an attempt has been made to define the needs and opportunities, to indicate the health workers most concerned, to outline the objectives, and to state the broad principles of content, method and organization, in health education training for professional and auxiliary health workers, including specialists in health education of the public.

The Committee expresses its deep appreciation to the members of the WHO Expert Advisory Panel on Health Education of the Public, and to the authors of working papers on various aspects of health education training, who contributed many constructive ideas and suggestions on the agenda during the period of preparatory work.

3. NEEDS FOR TRAINING IN HEALTH EDUCATION

Over and above each technical act, there is a corresponding educational function which doubles the value of the act, prolongs it, increases its efficacy, and endows it with real human and social value. — Piette Delore ¹

Health education of the public in the form of precepts, regimens and taboos has formed part of medicine since earliest times. Recently it has experienced a renaissance with the growth of the modern public health

¹ In: World Health Organization, Regional Office for Europe (1953) European Conference on Health Education of the Public, London, 1953, Geneva

movement. Specific training in its theory and practice is of even more recent origin and is not yet widespread. There is, however, among various health administrations, an increasing demand to include or to augment training in health education in the various training programmes for doctors, nurses, midwives, environmental sanitation workers, and other health workers. A growing need is also being experienced for specialists in health education for senior posts of planning, administration and training. These demands have been voiced by conferences and seminars of widely different health interests, and in particular by the health education seminars and conferences convened by the World Health Organization and the International Union for Health Education of the Public.

Every health worker who is in close contact with the people has a potential influence on the knowledge, attitudes and health practices of the people with whom he works. In order that the best results accrue from these contacts it is essential that doctors, nurses, midwives, environmental sanitation workers and others with a specialized health knowledge become more conscious of their educational responsibilities and approach them with confidence, optimism and a variety of techniques.

Many health workers already have, to a greater or lesser extent, the ability to educate or influence their patients, the family members, and the general public. With a more systematic and specific training in health education this influence could be widened and increased in effectiveness. Education in health matters is exacting work requiring high technical and ethical standards, and official recognition of its contribution will help to increase the interest, effort, and support of all health workers.

The Committee wishes to stress that the trend today is to base health programmes on the assumption of extensive personal and public participation and responsibility on a well-informed basis. Therefore, it is essential that all members of the health team acquire a thorough understanding of the most appropriate educational methods and means which can serve to enlist this public participation and thus enable the people to do as much as they can for themselves with the aid of technical health services.

4. THE OBJECTIVES OF TRAINING

The Committee suggests that the objectives of training personnel for their educational functions need to be considered in relation to the main aims of health education. They note with approval the main aim cited in the first report of the Expert Committee on Health Education of the Public, namely: "The aim of health education is to help people to achieve health by their own actions and efforts. Health education begins therefore with the interest of people in improving their conditions of living, and aims

at developing a sense of responsibility for their own health betterment as individuals, and as members of families, communities, or governments." 1

In addition, the Committee draws attention to the main general purposes of health education, which are: (a) to make health a valued community asset; (b) to help individuals to become competent in and to carry on those activities they must undertake for themselves, as individuals or in small groups, in order to realize fully the state of health defined in the Constitution of the World Health Organization; and (c) to promote the development and proper use of health services.

In view of the above, the Committee considers that the main aims of training in health education need to be considered first in relation to all health workers, and secondly in terms of training health education specialists. In respect of health workers in general, some training in health education would help; the main objectives are:

- (1) To create an awareness and understanding of the health education aspects of health work, and of the principles and procedures to be considered in achieving these purposes.
 - (2) to foster an interest in health education in all health personnel.
- (3) To enable health workers to incorporate effective health education in their daily work.
- (4) To increase the ability of health personnel to communicate with individuals, families, community groups, and the general public.
- (5) To enable health workers to make continuing evaluation of the educational aspects of health programmes.
- (6) To stress, as appropriate, the necessity of individual effort and teamwork for the realization of effective health education.

The main objectives of training health education specialists are:

- (1) To establish professional standards. For the protection of the public and to establish public confidence, it is essential that specialists in this field possess an ethical code and technical competence which governs their behaviour and standards of performance. The effects of health education may be long-lasting and can profoundly influence human behaviour on matters of vital importance. For this reason the highest degree of integrity and skill is required of its practitioners. The best guarantee that high standards will be maintained is proper selection and training.
- (2) To prepare specialists with the highest possible technical competence and skill for responsible leadership posts involving health education planning, organization, methodology, training, studies and research.

¹ Wld Hlth Org. techn. Rep. Ser., 1954, 89, 4

5. HEALTH WORKERS FOR WHOM TRAINING IN HEALTH EDUCATION IS NECESSARY

The work of health personnel varies considerably throughout the world and within countries. Some work in isolation, others in groups, and others again in integrated teams of specialists, with division of labour. The health education training required for these different types of practice will vary, but the Committee considers that some basic training is needed in the professional courses of all medical and health workers and also subsequently. Particularly the committee mentioned:

- (1) private medical practitioners, dentists, etc.;
- (2) medical officers of health (public health administrators), specialized medical personnel in various branches of preventive medicine and public health work, public health nurses, midwives, health visitors, health inspectors, sanitary engineers, health education specialists, medical social workers, nutritionists, and other specialized workers in public health services;
- (3) hospital physicians and surgeons, administrators, nurses, dietitians, pharmacists, physiotherapists, specialists in various branches of clinical medicine;
- (4) industrial physicians, engineers, nurses, and personnel specialized in various aspects of industrial safety and accident prevention;
 - (5) other health workers according to local conditions.

In addition, the Committee considers that certain workers in related fields who are not normally members of the health team should have opportunities for appropriate training in health education by virtue of the important contribution they can make. Particular reference, in this respect, is made to school-teachers, home economists, agricultural extension workers, non-medical social workers, various other workers engaged in fundamental education and community development, religious leaders, native healers, and others.

6. THE SCOPE OF HEALTH EDUCATION OPPORTUNITIES

All people of all ages can benefit from health education in the many and varied circumstances of their personal, family and social lives. These opportunities have been described by the Expert Committee on Health Education of the Public,¹ and the members were pleased to endorse their predecessors' findings.

It was considered, however, that there should be greater recognition of the urgent needs and opportunities for education in mental health

¹ Wld Hlth Org. techn. Rep. Ser., 1954, 89, 6

as it affects the home, schools, colleges, industry and the community at large. This would apply particularly to the quality of emotional life which parents provide for their families, the emotional climate of the classroom and the college, the relationships within industry, and the degree of participation by the people in affairs of local government.

6.1 Population groups interested

The opportunities of health workers for carrying out health education with various groups of people were therefore considered in some detail and summarized as follows:

- 1. Healthy persons. Health education may be carried on among persons in health during their school days, during military service, in the factory, in the office, on the farm, and among the general public. Such persons include the following special groups:
 - (a) Schoolchildren—every interview of the physician or nurse with teachers, school administrators and the schoolchildren can be used as an opportunity for health education. Health education should be a specific and integral part of all aspects of school life and all branches of teaching.
 - (b) Adolescents—students of this age require in particular some direction on the subjects of healthy recreation, sports hygiene, alcoholism, tuberculosis, venereal disease, the hygiene and risks of their occupations, first-aid and eugenics. Girls should be given instruction in household and food hygiene and puericulture.
 - (c) Parents—the mother is the first health educator of her children, and "parents' schools" and courses in home economics lend themselves particularly well to the imparting of health education.
 - (d) Leaders of occupational groups and trade unions—these leaders can play a very important part in helping to stimulate an interest in, and a study of, health matters of particular concern to their members and special circles.
 - (e) Political leaders and policy makers—politics as the art and science of meeting the needs of an epoch affect health matters and medicine; any public health programme, including health education, finally affects the political outlook. Therefore, political leaders at all levels, from the communal or municipal to the ministerial or national, should be aware of the need for health education and of its value
 - (f) Press, radio, and cinema—the role of the press in the health education of the people cannot be over-emphasized; it can be a beneficent or a malevolent role according to the material publicized.

The same applies to the radio and to the cinema. Those responsible for health education should therefore approach directors of the press, radio and cinema and try to interest them in public health, and to obtain their co-operation in various health education undertakings.

2. Sick persons. There are opportunities for health education among the sick in their homes, in out-patient consultation centres, in dispensaries, in hospitals and in rest and convalescent homes.

6.2 The role of hospitals in health education

The hospital may serve as an important centre for health education activities, especially in those countries where mothers are allowed to stay with their children and give them simple attention while they are patients in hospital.

"During their stay in the hospital mothers can be taught how to care for their children during sickness and how to feed them correctly and make use of ordinary hospital routines including bandaging, nursing care, etc. The mental health field is also full of promise. Hospital physicians can do much in this way by their own attitude to patients, give them simple and kindly instructions, and above all treating them as persons rather than cases." ¹

In some countries hospitals have taken steps to develop and to stress health education activities, and medical societies have organized public forums, conferences, and discussions in which physicians exercise an important leadership role in the sponsorhip of systematic health education activities with the public. There is, however, in most parts of the world, an important need for more detailed study to determine the most practical and suitable methods and approaches for health education work in connexion with the private practice of medicine and the opportunities afforded through hospital services.

6.3 Relationship to broader programmes of community development

But when I came to consider local government, I began to see how it was in essence the first-line defence thrown up by the community against our common enemies: poverty, sickness, ignorance, isolation, mental derangement and social maladjustment. The battle is not faultlessly conducted, nor are the motives of those who take part all righteous or disinterested, but the war is, I believe, worth fighting, and this corporate action is at least based upon the recognition of one fundamental truth about human nature: we are not only single individuals, face to face with eternity and our separate spirits; we are members one of another.

Winifred Holtby, South Riding

¹ Chron. Wld Hlth Org., 1957, 11, 210

The Committee is of the opinion that in discussing needs and opportunities for health education they should not lose sight of the fact that the work of the trained health worker is most significant when it forms part of a well-integrated whole.

Health education training should lead the health team to relate its activities to those of the rest of the community and to the broader team of technical workers engaged in the development of the community, such as co-operative movements, agricultural extension services, home economics, fundamental education, school education, social welfare, housing, industry, the arts and others.

Relating its activities to the total effort should result in the health team's being concerned with the success of the other technical agencies, as well as of its own, and in reciprocal success of all such agencies for helping the people to raise the standard of their living. All health work is therefore an integral part of social policy, and health education is one of its principal instruments.

7. THE ROLE OF VARIOUS WORKERS IN HEALTH EDUCATION

7.1 Physicians

In principle, the Committee recognizes that every medical act provides an opportunity for useful educational work. For example, when attending a patient who is ill with a communicable disease, the physician has the important duty of instructing the family on the specific care of the patient and the safeguards to be taken by the rest of the family. In addition, he may have the opportunity to give guidance on health matters of concern to the family regarding child care and feeding, or other health problems. Treatment of illness is recognized as only a part of the total professional responsibility of the physician. His responsibilities are considered to include also those educational interventions which will contribute to the application of preventive measures by the individuals and the families whom he serves. Experience has shown that physicians who respond to the concerns, anxieties, and curiosity of patients and their families find that a well-informed and educated patient is more likely to be a satisfied patient.

Physicians can, as many do, engage in health education activities under a variety of circumstances in clinics, in homes, in their offices, in hospitals, in governmental health services, or in group practice in connexion with patients and members of voluntary health insurance schemes. In some countries the health education of the population is both a moral obligation and a specific part of the duties of all physicians. This obligation arises from the realistic conception of health education, as one of the methods of curative and preventive medicine. However, physicians frequently carry

on health education without real awareness of the educational needs of the patient and with inappropriate methods.

For these opportunities to be more adequately used, certain prerequisites are necessary. Firstly, the most useful results occur when the physicians are sensitive and alert to the educational possibilities in the patient-doctor relationships. For busy practising physicians this is not easy. However, evidence exists that valuable organized health education activities with patients can be arranged particularly where physicians are organized in group practice. More specific training would enable doctors to become more conscious of their educational influence.

7.2 Nursing and midwifery personnel

It is generally agreed that health education is implied in every nursing activity, irrespective of the setting in which the nurse functions.

The Committee notes that health education is implied in each of the major functions considered to be essential if the nurse is to fulfil her role in health programmes as delineated in the report of the technical discussions on "Nurses: Their Education and their Role in Health Programmes" which were held during the Ninth World Health Assembly in 1956. These functions include:

- (a) Giving skilled nursing care to the sick and disabled in accordance with the physical, emotional, and spiritual needs of the patient, whether that care is given in hospitals, homes, schools or industries.
- (b) Serving as health teacher or counsellor to patients and families in their homes or sanatoria, in schools, or in industries. Because of her extensive and intimate contact with the patients and families, the nurse usually has the confidence of the family and is in a strategic position to put scientific information into simple language which they can understand, accept and put into practice.
- (c) Making accurate observations of physical and emotional situations and conditions which have a significant bearing on the health problems, and communicating these observations to other members of the health team, or to other agencies having responsibility for that particular situation. Thus the nurse is a very valuable liaison between the patient and the physician, the research scientist, the sanitarian, the social worker, the school-teacher, or the industrial foreman.
- (d) Selecting, training, and giving guidance to auxiliary personnel who are required to fulfil the nursing service needs of the hospital or the public health agency. This also involves an evaluation of the nursing needs of

¹ See Chron. Wld Hlth Org., 1956, 10, 207.

a particular patient, and assignment of personnel in accordance with the needs of that patient at a particular time.

(e) Participating with other members of the team in analysing the health needs, determining the services needed, and planning the construction of facilities and the equipment needed to carry out those services effectively.

Nursing, including midwifery, is a personalized service, close to the people. By reason of services rendered in time of emergency, like medicine, it commands respect and provides a good climate for health education, through the nursing service in the home, health centre, special school, clinic, hospital, or industrial medical service. The individual services provided by the nurse to the patient, or to families and community groups, present many important opportunities for health education. The public health nurse, for example, working closely among people, knows their particular conditions, their economic situation, and their special beliefs and prejudices. Her educational work with families on particular health problems can therefore be geared to their several circumstances.

Consideration was given to the extent to which existing training programmes for professional and auxiliary workers in nursing and midwifery services are already incorporating the principles, methods and media of health education. It appears that this provision is already made to an important extent in some countries, but more study and information is needed to determine more specifically what emphasis is given to health education and how this is being carried out. The Committee notes, however, that health education principles and skills are not generally introduced into the curricula of all nursing schools. These are mainly undertaken in advanced courses for public health nurses and teaching specialists, although they would be of value to every nurse.

The Committee is of the view that in many parts of the world the midwife as a member of the health team has great opportunities for health education influence with families and community groups. In a great many areas she is the only health worker living and working with people in the villages. Her influence with people is sometimes greater since she is often of local origin and is regarded with respect and confidence. The Committee notes with special satisfaction the emphasis given to health education aspects of midwifery services in the First Report of the WHO Expert Committee on Midwifery Training.¹

7.3 Environmental sanitation workers

The Committee notes that all of the reports of the WHO Expert Committees on Environmental Sanitation have recognized the part of health education in programmes of environmental sanitation.

¹ Wld Hlth Org. techn. Rep. Ser., 1955, 93, 4

Almost every branch of environmental sanitation has its health education aspect, and various sanitation personnel 1 have excellent opportunities for practical educational work on sanitation problems. There is some tendency to regard health education as an activity separate and apart from the exercise of technical functions involved in environmental sanitation programmes. In other words, such activities as the giving of public lectures or talks to specialized groups, and organizing exhibitions and campaigns, are often accepted as the limits of health education. Advice given to individuals in their places of work on such matters as food hygiene, or the use of smokeless fuel, is often not recognized as health education, which does in fact constitute a specific part of the regular everyday duties of sanitation workers. They visit people in their homes, meet food-handlers at their place of work, and are in constant and close touch with many groups in the community whose activities have a special public health significance: for example, people engaged in certain trades such as the production, preparation and distribution of food and drinking-water, employees of industrial undertakings, and workers exposed to special occupational risks.

It is an accepted fact that people learn more rapidly and thoroughly by demonstration and participation than by theoretical instruction. Thus sanitation workers have unrivalled opportunities of carrying out effective health education by demonstrating on the spot how the principles and practices of environmental sanitation should be observed, and pointing out faulty habits and practices as they occur.

In order that health education may become a more systematic and deliberate aspect of the daily activities of all sanitation workers, it should be specifically provided for as an integral part of their training.

Legislation increases in volume and scope as sanitation programmes progress; and as some problems are brought under control or solved, demands arise for further activity in other directions. But all the time education is playing its part. The public needs to be educated to accept legislation; legislation can only be effective if it is firmly based on an informed public opinion.

7.4 Health education specialists

The Committee endorses the views expressed in the first report of the Expert Committee on Health Education of the Public regarding the need for professional training of health education specialists.² A nucleus of these trained specialists is being employed by an increasing number of health administrations. In these health departments they assume profes-

¹ The term "sanitation workers" as used in this report includes sanitary engineers, sanitarians, health inspectors, health assistants and health aids.

² Wld Hlth Org. techn. Rep. Ser., 1954, 89, 29

sional responsibilities which include (a) technical leadership in ensuring systematic planning, organization, administration and evaluation of health education aspects of various health services and programmes; (b) technical guidance with planning and conduct of health education training for health workers, school-teachers, and workers in related fields; (c) technical assistance in the selection, development, pre-testing and uses of educational methods and media; (d) co-operation with others in planning and execution of studies and research on problems and methodology of health education; and (e) consultation services and assistance in planning educational aspects and methods involved in conduct of seminars, conferences, meetings, various training courses, etc.

7.5 Auxiliary health workers

Many countries employ various types of partially trained auxiliary health workers who have limited skills and responsibilities in medicine, nursing, midwifery or sanitation. Such personnel supplement the professional workers, and in many cases are part of the health team, but in other instances, such as paramedical "dispensers", they are working of necessity under somewhat remote supervision. For all such workers, preparation for their health education functions must be an important component of their initial training.

7.6 School-teachers

These must be considered as the health workers' principal collaborators; it is they who will present to schoolchildren the elementary ideas of hygiene and prophylaxis, thus creating "health consciousness" in the children from their early days. It is important, therefore, to provide teachers with health education.

This means that the health education services must turn their attention particularly to the teachers' training schools in order to obtain their collaboration, to provide them with documentation, and to encourage them to stress the health aspects of the subjects they teach. A particular appeal should be made for collaboration on the part of teachers of natural science, biology, elementary physiology, home economics, history, geography, drama, etc.

The Committee notes with particular satisfaction that WHO and UNESCO have recognized the important potential contribution of school-teachers by developing jointly a study guide for teacher preparation for health education to be used by national authorities and leaders in education and health concerned with teacher-training and school-health programmes. In the opinion of this Committee, this study guide would not only prove to be a useful tool in itself, but would contribute to bringing about a better understanding between the school and health fields.

7.7 Social workers

Professional social workers are valuable colleagues and resourcepersons for health workers. In many situations medico-social workers are members of the health team. Social workers have skills in communication, and a knowledge of human behaviour and of principles and methods of community organization which enables them to act as useful resourcepersons in health education activities.

In addition, there are many types of non-professional social or religious workers who are active in communities. If all these people had some knowledge of health principles, they could be invaluable auxiliary workers in health education aspects of various health programmes.

8. PLANNING, ORGANIZATION, AND CONDUCT OF HEALTH EDUCATION TRAINING

We cannot leave the development of health education to chance. We must give it an aim and it must be planned.

— V. S. Ershov

8.1 Some basic principles in planning

It is important to ascertain that the introduction of health education into undergraduate and post-graduate training programmes which may call for reorganization of curricula and creative thinking is fully justifiable. The available evidence (see Annex, page 38) suggests that this is an effective tool in the prevention of illness and in health promotion, best used by persons specially trained to do so.

The scope and content of any training of health workers will depend on two principle factors; the organization and functioning of health education on the one hand, and of public health, medical and hospital services on the other, and these vary from country to country. Certain basic aims are, however, common to all responsible for the planning and organization of such training.

Broadly speaking, the aim is to equip all health workers to "diagnose" and "treat" the "educational condition" of the individual or group they serve. Making the "educational diagnosis" on which successful health education "treatment" can be based is a highly skilled job for which aptitude as well as training is necessary. Personality factors count for much in health education, and the training itself should have as one of its main purposes the development of a general culture and a mature personality capable of accepting the limitations as well as the positive elements of the present body of health knowledge.

Essential also to the diagnostic process is an understanding of the physical environment, economic state, social custom and belief in relation to health, and the influences which various members of the family or the community have on health decisions. A training which cultivates the habit of working with people rather than for them, in the study of their problems as well as of the means by which they may be alleviated, tends to eliminate the danger of the wrong "diagnosis" and therefore of ineffectual educational "treatment".

Human beings are always important elements in the environment of others. The study of the relationships of people to one another in the community, and also in the particular patient doctor/nurse situation, is therefore a major part of the training for educational work, which by its nature always involves an exchange of knowledge or ideas between at least two people. The training will also include some study of education, psychology, social and preventive medicine, anthropology and sociology to provide the knowledge which will guide the health worker in his assessment of the educational situation.

The success of education will depend partly on the accuracy of this assessment, but also on the health worker's skill in communication with people. This skill can be increased by a training which develops an understanding of the way people learn, and the ability to choose and use effectively the various techniques which facilitate and encourage learning. The ability to listen, learn and teach must be made effective on a personal and also on a community basis, and for this the health worker needs some training both in the team work and in administration. He must be able to plan, organize and conduct his educational projects, and to evaluate their effectiveness.

Successful education also depends on an appreciation of the way the members of the health team are received by the community and of their relative prestige, for the opinion of the community may sometimes be at variance with the conceptions that members of the team have of their own roles. Thus, the recipient of medical treatment or health advice may listen respectfully to the physician or nurse, giving the impression that the words are being understood—a fact which may or may not be true. The greatest trouble in communication comes when the member of the health team and the recipient of the advice are far apart in the class structure. Complementary to this is the fact that the public health worker will hold certain values about cleanliness, or dental care, or prevention that are part of the system of values that are associated with his class position. The values associated with the class position of the recipient of the advice may be quite different. To put it another way, the two may not "talk the same language".

The health worker may need the assistance of others with expert knowledge of some particular aspect of health or social action. An important

part of his training will therefore include learning where these resources may be found, and experience in working with other members of the health team and with workers in related fields.

Within these broad principles there will be many variations of emphasis and content to suit the needs of workers with different educational backgrounds and different professional duties. In general, however, health education training programmes should be developed at two levels—one for all members of the health team, and another for the health education specialist.

8.2 Some factors of importance in planning

The following points should be considered in the preparation of any training plan:

- (a) the demand for health education skills; before introducing or revising any curriculum to prepare future or in-service personnel to act as educators, the need for this skill must be recognized by those who are responsible for the protection and improvement of the health of the community;
- (b) the major public health problems of the region amenable to improvement through education;
- (c) the local conditions and the habits and resources of the people among whom the health worker will be employed;
 - (d) the specific objectives of the training course;
- (e) the functions, responsibilities, interests and needs of the personnel to be trained, their basic professional training, and previous experience in public health and in health education;
- (f) information regarding, and evaluation of, previous training programmes of this type, within and outside the country; the evaluation can be made from information received from the organizers of such courses, the teaching staff and students, "post-graduates" working in the field, and from the employing health authority.

8.3 Planning the curriculum

8.3.1 The selection and organization of content

The following topics should be considered for inclusion in the training programme:

(a) general orientation to public health and community programmes—the contribution of the individual to the total effort;

- (b) health education opportunities presented in specific functions of the personnel being trained;
- (c) the learning process, and the principal factors which influence and contribute to it;
 - (d) methods, skills and techniques used in health education;
- (e) planning, preparation, pre-testing, selection, production, use and evaluation of audio-visual materials in health education;
 - (f) principles and techniques of evaluation and research.

8.3.2 The educational methods to be used

These will be discussed in more detail with reference to the training of the different medical and health workers. The teaching methods which have proved to be most effective are those which take into account the interests of the learner and which offer him the opportunity of participating actively in the learning process. Among these, the following may be considered, care being taken to use the method appropriate to the culture and educational level of the group:

- (a) interviews, short talks, and lectures;
- (b) demonstrations;
- (c) group discussions;
- (d) panels, symposia, round-table discussion, short lectures followed by group discussion;
 - (e) sociodramas and role-playing;
 - (f) seminars, study groups and workshops;
 - (g) practice in applying the methods or procedures being taught;
 - (h) field studies or observation trips;
- (i) other methods such as participation in committees and professional meetings.

All teaching methods used in the training course should be evaluated from time to time. This evaluation is important because methods vary in effectiveness and acceptability in different cultures.

8.3.3 Appraisal of effectiveness

Changes in the attitude or practice of the students both during and after the course can be determined in the following ways:

(a) direct observation by the teaching staff to judge the degree of interest, participation, and understanding demonstrated by the students;

(b) appraisal of the results subsequently obtained by the student in his work with the public health team and in the community where he is assigned after receiving this education.

8.3.4 The length of the course

This can only be decided locally, in accordance with the particular objectives of the course, the backgrounds of the students, the resources available and (for in-service personnel) local working conditions. But it was generally agreed that for specialists in health education at least one academic year of post-graduate training is required.

8.3.5 Staff requirements and resources

It is important that all the professional staff who might later take part in the conduct of the course are involved in the planning of the training programme. Every effort should be made to enlist the co-operation of qualified staff from such disciplines as psychology, education, anthropology, sociology and communications in addition to the health staff, and to work out with them a balanced programme of theoretical and practical instructions.

Close co-operation with the national health services is also necessary in planning the training in health education so that the teaching and the subjects covered are related directly to the public health needs and programmes of the country concerned.

Though it is always wise to begin on a modest scale and to plan ahead for future needs in terms of teaching staff, it is essential to have a nucleus of well-qualified personnel with specialized knowledge of health education methodology to help with the planning and conduct of any training course. This professional nucleus can assist in planning studies on health education problems, in the production of suitable visual aids, and in arranging for the students practical work in the field, and experience with the various health services of the region. (The latter is particularly important in the training of the health education specialist.)

Co-ordination of the health education training of health workers with training schemes for agricultural extension workers, school-teachers, social workers, adult educationists and home economists is also valuable, and should be considered during the planning stage.

8.4 Organization and conduct of training

8.4.1 Physicians

For reasons already stated, opinion was unanimous that the concept and principles of health education should be introduced as early as possible into the training of all health workers. The training of medical students should therefore include those aspects of health education which are

complementary to their technical instruction relating to disease, its prevention and treatment. This will be facilitated by the present-day trend towards the teaching of preventive and social medicine as part of the basic medical course. The opportunities provided for the student to come into contact with the patient in his home, surrounded by his family, and with the personnel and work of medico-social centres, will enable him to realize his future place in the total effort to improve health, and the particular contribution of other workers with whom he can later co-operate, as well as the educational tasks which lie ahead. In addition, some instruction specifically relevant to health education is necessary so that the student may acquire some understanding of:

- (a) the cultural and social factors affecting people's ideas and actions about health;
 - (b) the learning process;
- (c) the psychological factors which influence the behaviour and learning capacity of individuals or groups of individuals who come together as learner and teacher, doctor and patient, or doctor and other health workers;
 - (d) educational methods and techniques.

The teaching methods used in his professional education will condition the student's attitude to his own methods of health education later on. Professional teaching methods should therefore include those which are also commonly used in health education, such as case conferences, tutorial and free group discussions, projects, practice in a variety of interview techniques, panel discussions and dramatized health incidents, etc. An understanding of his own assumptions and the influence they have on his capacity to observe and communicate can facilitate his learning significantly, and give him insight into the way in which patients' assumptions may influence their behaviour. Many other techniques of communication would merit study, such as the creation of patients' clubs similar to those run by several general practitioners and health departments, at which discussions are held. The ability to produce well-designed and written material for conveying instructions and to use simple audio-visual aids such as tape recordings and flannelgraphs, may provide important stimulation to the doctor in his role as an educator.

Above all, he needs to learn how to express himself clearly and simply, and how to develop the art of talking and listening to patients and their relatives—an art which has to be learned as painstakingly as any other.

The in-service training of doctors working in hospitals, general or group practice, is more difficult to organize. Group meetings, seminars, refresher courses, discussions organized with the assistance of health education specialists, or by a mobile visiting team, have proved effective in stimulating interest and increasing technical skills in the field of health education.

In the USSR health education is an important obligatory part of the work of all doctors. Medical students receive a brief theoretical course on the methodology of health education, and practical experience in the giving of lectures and talks—as well as instruction in the health education aspects of the particular medical discipline being studied. Special health education centres continue the work begun in the medical schools, with regular refresher courses to maintain the health education activities of general practitioners at a high level. Elsewhere, study of the patient's reactions to, and feelings about, his stay in hospital are leading to educational programmes involving physicians and other hospital personnel.

8.4.2 Nursing personnel

The present tendency in schools of nursing throughout the world is therefore similar to that already described in the training of doctors—namely, a broadening of the interpretation of the nurse's function to include the social, preventive and educational aspects of her services to the patient. This is being done in a variety of ways, e.g., by introducing into the curriculum some of the social sciences, such as psychology, human behaviour and relationships, social structure and community organization, and by including social and preventive aspects in the teaching of the special subjects, for example, medicine, paediatrics, and maternity nursing.

The inclusion of a tutor with public health preparation among the teachers can greatly facilitate this wider training, with responsibility for (a) developing opportunities in the wards, out-patient departments and community for learning about health and prevention; (b) assisting nurses and other teachers to introduce these concepts into their special subjects; (c) assisting in nursing-care seminars; and (d) special tuition on public health nursing.

Team nursing and patient-care conferences, when the different workers involved in the rehabilitation of the patient discuss together their various responsibilities, help the student nurses to develop skills in group participation.

The educational methods used in her training, and the prevailing attitude of staff to students, will greatly influence the nurse's approach to her patients, as well as the educational methods she herself will later employ.

Preparation for public health nursing (health visiting), whether given during basic nursing education or at the post-basic level, needs to give particular attention to the development of knowledge and skills required for the nurse's health education functions. Where nursing students are introduced to public health concepts and skills during their basic training, education for public health nursing can be given at a more advanced level.

To carry out these functions the public health nurse needs an understanding of human behaviour and practised skill in the technique of

interviewing. She needs an understanding of educational method and should be given an opportunity to develop skill in using various methods of teaching—lecture, demonstration, group discussion and group leadership. She should be familiar with various types of audio-visual material, their planning, production and use. She should also have knowledge of her own social culture, institutions and organization, and of her functions and responsibilities within this structure, and should have practised skill in working as a member of a team, and co-operating with colleagues in her own and related fields.

The curriculum of the public health nursing course must therefore include material on the social and psychological sciences upon which will be based the development of health education skills. It should also emphasize field experience. A high value is placed, for public health nursing students, on joint study, field experience, and discussion of particular problems with other health students from related fields.

8.4.3 Midwifery personnel

The role of the midwife gives real opportunities for the propagation of health education—and gratifying results. The training of the illiterate village midwife in the Sudan, for example, has proved practicable and successful. In that country, in addition to their functions in carrying out normal deliveries, they are invariably given instruction in baby hygiene and normal and artificial feeding and weaning, as well as in minor disorders of infants and the care of the premature baby. They practise in ante-natal clinics throughout their training as well as after it, and are allotted cases of expectant mothers to look after during pregnancy. In the Sudan a unique arrangement exists for the training of illiterate midwives, and devolution of their training schools to provincial headquarters in order to bring them up against the background of their own environment. Their change in outlook, which is reflected in better standards of ways of living and is apparent in home hygiene, has set spectacular examples to others in their own environment. Infant and maternal mortalities have been appreciably reduced, and the present demand by rural population exceeds the turnover from schools.

In general, the essence of the midwife's educational influence is her rapport with the villagers among whom she is a respected member. Her training should therefore seek to preserve this by the avoidance of insistence on procedures which are beyond the means and resources of the villagers to carry out, or contrary to their customs or beliefs, or unnecessarily perfectionist.

In other circumstances the training of midwives has been expanded to include additional educational skills, particularly those relating to

working with groups of expectant mothers. The acquisition of these skills has required that special time and instruction be devoted during the normal training period to the health education aspects of their work.

8.4.4 Environmental sanitation personnel

Changes in the education and training of sanitation personnel may be said to follow the words of a leading statesman of the last century: "Sanitary instruction is even more essential than sanitary legislation, for the best laws are waste paper if they are not appreciated and understood." A great deal of the work of the sanitary officer is creating the necessary understanding "by advice, persuasion and education" which forms the basis of all legislation.

Adequate training for this task aims at enabling sanitary workers to carry out health education as a normal regular part of their everyday duties—mainly through personal contact with the citizen, and also special activities such as educational campaigns through the press, radio or television, and by organized demonstrations, specific projects, and lectures among the general public or with special groups of people. Their health education training must therefore include:

- (a) Knowledge of sanitation. Before he can teach good sanitation methods effectively, the sanitation worker must himself have a satisfactory knowledge of these methods. "Nothing can take the place of sound scientific facts in the developing and understanding of hygiene. Half-truths, conjectures and flimsy explanations never suffice."
- (b) Thorough knowledge of the people with whom he is working. The more the sanitation worker knows about the people he is trying to educate, the better are his chances of getting the desired co-operation. He must know their interests, their problems, their cultural background, their religious beliefs, their present knowledge of sanitation, their educational level and their sense of values.
- (c) Knowledge of educational methods. The training of sanitation personnel should increase their ability to communicate with the public in order that the public may receive the desired message on sanitation, understand what the message is, believe in it and translate the understanding into action at all levels of sanitation work. This involves training in methods of education and communication, including use of mass media and instruction on the preparation of bulletins, pamphlets and visual aids. A knowledge of pre-testing techniques and evaluation methods is also desirable.

¹ Thomson, S. C. (1950) Health teaching in the university. Hlth Educ. J., 8, 85

Regardless of the level of the sanitation personnel, field training in education methods is highly desirable. Every effort should be made to provide training time and opportunities for the student to carry out health education work under the supervision of a trained instructor. Preferably, the training of sanitation personnel in health education should be given jointly with that of other professional groups. In a class-room situation, this joint training of health personnel constitutes a prelude for co-operation between professional groups when they get into the field. As with all other health personnel, provision should be made for in-service training or refresher courses, so that they may keep themselves informed of new developments and changes in technique.

8.4.5 Public health personnel (post-graduate)

By common consent the essential elements in the health education training of public health personnel appear to be:

- (a) a thorough knowledge of the basic discipline, medicine, nursing sanitation, nutrition or paediatrics, etc.;
- (b) a well-integrated training in the principles and practice of public health with ample opportunity for practical work in the field, preferably as a member of a multi-disciplinary team;
 - (c) an understanding of the behavioural sciences;
- (d) instruction and practice in educational techniques and the selection, preparation and use of various educational aids.

8.4.5.1 Public health practice

The content and organization of the general training in public health will vary according to the predominating public health problems in the country or region. If the student in public health is to become familiar with the educational approach to health problems, training methods must become adjusted to this objective and he needs to work with and in the community as a part of his training. Thus, in advanced training for public health—and in training for health education of the public—the community should be used as the laboratory of the school. Especially in training for health education this experience should consist of practical work, rather than merely visits to health departments, schools, and similar institutions.

From his own attempts to evoke action in a group or a community the student will most readily learn that no group is simply the sum of its individual members. Given a practical task in his field work, he must find and work with the leaders of a group or he will never succeed in promoting action. Schools of public health or institutes of hygiene which use the community for supervised field work can provide the student with this most valuable practical experience.

The public health student should be trained by those methods which he will later be expected to apply in his function as a health education worker. As health education aims at enlisting active participation of the public, it will be sound policy to make use of various teaching methods which offer the trainees the opportunity to take an active part in learning educational skills through practice and experience.

8.4.5.2 The behavioural sciences

Most students coming to a school of public health or an institute of hygiene will have had comparatively little opportunity in their educational background to study human behaviour in a unified or integrated way—that is, to see how the combination of biological, psychological and sociocultural factors motivates human behaviour and determines the manner in which the human individual reacts to situations. Although the students will have had courses in various of the biological and social sciences, the *interaction* of the biological, psychological, and socio-cultural levels has probably been taught in a haphazard manner, if at all.

Three main areas of teaching are important. First, there should be an opportunity to present the basic concepts of the sciences of human behaviour which have relevance for the behaviour of people in matters of health. Second, there should be a presentation of relevant research findings from the social sciences which bear directly or indirectly on public health programmes. Finally, opportunity should be given to students in public health for experience in working with people in groups and understanding some of the forces that govern group interaction.

Successful education of the public in health matters not only rests on an understanding of the basic concepts in human behaviour, but also on a knowledge of beliefs and attitudes people have toward certain fundamental problems. Beliefs about disease and injury, and the treatment of these conditions, are woven into the matrix of social structure. People differ widely, though, in their understanding about illness and the ways they have developed for handling it, and they cling to their beliefs and attitudes with a tenacity that is often surprising. There is pertinent material in the social sciences which can be useful in helping to solve this problem, and there should be opportunity in the public health curriculum for its systematic presentation.

Factors other than those relating directly to disease or the people that treat or prevent disease are also pertinent to the health education of the public. For example, the social and political structure of the community, the informal lines of communication, the persons of power and influence, are important factors in any health programme.

8.4.5.3 Team work experience through joint instruction

Joint instruction in health education is very desirable in all forms of training, and efforts should be made to arrange for this in institutions where several types of personnel are already being trained together for all or part of their professional preparation. In different parts of the world one finds such joint instruction being given through either elective or required courses. In localities where the professions are taught in separate but neighbouring institutions, arrangements might be made to bring students together for a combined course in health education, a procedure which could conceivably provide a beginning for joint instruction in other appropriate fields.

At the American University of Beirut, for example, all graduate students in the School of Public Health are required to take at least a one-semester course in public health education. This is an introductory core course and is taught on two levels—the diploma level and the certificate level. The diploma level is taught to students majoring in public health administration for physicians, sanitary science, public health engineering, public health education, public health statistics and hospital administration. The certificate level course is taught to public health nurses and students majoring in basic sanitation as well as special non-degree students who are pursuing courses offered in the Department of Public Health and Preventive Medicine.

The theoretical preparation in health education is not limited to the specific courses offered in health education only, but is integrated into courses such as sanitation, epidemiology, social problems, public health administration and other related courses as the opportunity arises. Courses, particularly where health education is emphasized, are taught by discussions, lectures, workshops, and the like. Students' participation and leadership are emphasized through panels, symposia and group research activities.

This theoretical training is complemented by a programme of integrated field observations, and by a 12-week period of supervised field training each year in which all the public health students, with different backgrounds, work together as a team.

8.4.5.4 Principles and methods of health education

Beyond the study of public health problems and of the behavioural sciences, as applied to public health, the professional public health worker needs specific training in the principles and methods of health education. This should include instruction and practical experience in:

(a) how to conduct interviews or other person-to-person contacts so that they have educational value (e.g., patient-doctor-nurse relationships);

- (b) how to organize and give instruction to informal groups (e.g., to give talks and lead discussions with groups of parents, teachers or industrial workers);
- (c) how to work in ways that have educational value with existing organizations concerned with health planning and action (e.g., professional, voluntary);
- (d) how to develop sound public relations (through personal contact and mass media of communication, including press, radio and television);
- (e) how to develop and use effectively various educational media (e.g., leaflets, exhibits and films);
- (f) how to work with school personnel in preventive health matters so that there is a joining of resources towards more effective school health education;
- (g) how to work with hospitals, industry and other institutions and groups so that there is a joining of resources toward more effective community-wide health education.

Opportunity should also be given during training to help future workers think out, as a team, and in relation to practical situations, ways of planning at staff and community levels for health education of the public.

To sum up, the training (post-graduate level) of the public health worker desirous of helping people to improve their health practices must ensure that he has a thorough knowledge of the problems involved. He must have interest in and understanding of people and communities, including their attitudes, beliefs, current practices, and value systems. He must be aware of the possible effects of change on their way of life. He must know where to find information on resources that can be used to help with educational activities, and the ways of using these resources. He must understand the principles of health education and have command of the methods and media appropriate to his field of work. He must know which educational methods are most likely to encourage desirable changes under different circumstances, and have a sensitivity as to when it is wise and right to use the methods.

8.4.6 Auxiliary health workers

These workers, who supplement the professional workers in different aspects of preventive and curative medicine, have similar—and sometimes, because of their closer contact with the people in their everyday work, greater—opportunities of carrying out health education than their respective counterparts. Their initial training should therefore include considerable emphasis on the health educational aspects of their work, adapted to suit their needs and understanding.

In general, the principles, content and methods already outlined for the health education training of the fully-qualified professional worker can be followed, with suitable modifications, for the respective auxiliary worker.

As with the teaching of all workers at this level, demonstration, practice and field exercise should form a large part of the programme. Every opportunity should be taken for supervision and staff education. Refresher courses at regular intervals will be valuable in maintaining interest and skill.

8.4.7 Health education specialists

The recent rapid development of health services and programmes in many parts of the world has created a demand among health workers for help in carrying out the educational aspects of their work. To cope with those demands, countries have utilized their available resources to organize short courses to enable health workers to improve their educational methods and techniques. Health administrators have found, however, that while these were of great help, they were inadequate for the needs of the situation. Hence a need has grown for the services of a nucleus of well-qualified health education specialists to assist with the planning and conduct of health education training for health workers, schoolteachers and others, and to provide technical leadership in the systematic planning, organization, and administration of health education activities. These specialists contribute to the health team the link of knowledge and methodology derived from a training designed to provide a fundamental understanding of the basic social sciences and of the principles and methods of education. In some countries these specialists are drawn from the medical or nursing professions, and in others they may come from professional backgrounds in biological sciences, psychology, anthropology, education, or other professions with a similar level of training and experience.

The Expert Committee on Health Education of the Public recognized this need, and in its first report ¹ listed the functions of such a specialist in health education. The most important, it was decided, were:

- (a) to strengthen and extend the educational functions of all members of the health team, and
- (b) to supplement their health education activities on a sustained and organized basis.

That Committee recognized that the training of specialized health education personnel would vary according to the needs of the countries.

¹ Wld Hlth Org. techn. Rep. Ser., 1954, 89, 29

In general it was agreed that their training should include, in addition to a good background of general culture and the arts, the following subjects:

biological and physical sciences;
hygiene and public health;
basic social sciences;
education and educational psychology;
special skills required in health education;
public administration;
carefully planned and supervised field and apprentice experiences.

These last should be regarded as important elements in the training as a means of developing skill and ability in the actual carrying-out of health education. Over and above this technical training, the overriding necessity for imbuing the student with the sense of his high ethical responsibility is stressed. Some countries have already begun to develop graduate training programmes for these personnel in schools of public health, institutes of hygiene, schools of medicine and universities.

Accounts of the plans and action already under way in various countries to meet the need for qualified health education specialists show very considerable agreement with regard to the special training necessary for this type of professional worker. The Committee felt that it might therefore be useful to countries planning new programmes, and to the maintenance of acceptable technical standards, if a summary of those standards and training requirements which had proved useful and practicable could be set out here.

Much of what has already been said about the health education training of public health personnel is applicable to the present subject.

The schools of public health, universities, schools of medicine, and institutes interested in developing courses for health education specialists, can use their own resources or those available from other scientific institutions with or without the help of national or international health agencies. In order to organize a sound curriculum, the teaching staff should include at least one or two full-time well-qualified health education specialists with special abilities in teaching. It is also desirable that the professors in charge of the basic public health science courses should have a proper appreciation of the health education features of their specialty.

When teachers on the staff of schools co-ordinate their subject matter, their method of work can act as a powerful example to the students and condition them to good working relations later on. It is also important that the institution conducting the programme has close working relationships with the official health services or related agencies of the community and with other schools carrying on similar programmes.

Before the establishment of a programme, careful consideration should be given to the availability of adequate library, laboratory and class-room

facilities, and to opportunities for the co-operation of lecturers from other disciplines, such as sociology, anthropology, psychology, adult education, community organization, etc. These factors will depend to some extent on the location of the school.

Once established, the facilities can also be used for short courses, seminars, etc., in educational and other aspects of public health for health workers.

8.4.7.1 Admission requirements

While requirements for admission to graduate programmes in health education will vary from country to country, or institution to institution, in general candidates who apply for admission to this field should fulfil the following conditions:

- (a) They should be university graduates from biology, social sciences or education, or the equivalent.
- (b) They should have had at least one year's experience in public health or an allied field.
- (c) They should have a genuine interest in people and have demonstrated an ability to get along with them.
- (d) They should possess such personal attributes as creative ability, tact, imagination, patience, emotional stability, adaptability, integrity, resourcefulness and good health.

In some countries it has proved useful for prospective candidates for training as health education specialists to spend a probationary period of at least six months, during which they are given an opportunity to acquire direct knowledge of the programmes and operation of the service, under the supervision of an experienced health education specialist.

The main purposes of this probationary period are:

- (a) to permit candidates to obtain direct knowledge of the organization and functions of the national health service;
- (b) to enable candidates to acquire a general idea of their future profession;
- (c) to give candidates an opportunity of judging their own capacity and aptitude for the profession;
- (d) to enable the health authorities to observe candidates and to assess their personal suitability and technical aptitude for the profession;
- (e) to save money, effort and time if, during the preliminary stage, a candidate realizes his own unsuitability, or the representatives of the health education service come to the conclusion that a candidate is unsuitable for the course.

In their practical work candidates become acquainted in particular with all the sections of a health centre; they are allowed to undertake certain practical activities which will give the professional worker in charge an opportunity of judging whether or not they possess the personal qualities necessary for the work.

At the end of the probationary period, the professional health education specialist responsible for supervision submits a report on the candidate's work to the committee which makes the final decisions concerning admissions to the course, and the candidate himself knows whether he is prepared to devote his energies to, and gain adequate satisfaction from, this type of work.

8.4.7.2 Curriculum

While there will always be a variation in the scope of graduate programmes in health education, they usually include:

- (a) basic science and public health courses;
- (b) special courses in relation to health education.

In the first group may be found principles of public health administration and practice, epidemiology, biostatistics, sanitation, nutrition, mental health, maternal and child health, and public health nursing. The second group covers principles and practices in education, methods and materials in health education, school health education, community organization in health education, group work, and principles of psychology, sociology and applied anthropology.

8.4.7.3 Field work

Practical experience in the field, complementary to all formal courses, is an essential and important part of the professional training. As has already been said, the community is an important laboratory for the student of health education and provides the best opportunity for learning by doing. To find out the activities, habits and needs of a community, to define a problem and develop a programme which meets these needs, to carry out the programme, and later to evaluate the results, is invaluable training.

Field work may well be considered a time-consuming method as it may take at least 30 % of the time of the training curriculum. To compensate, however, there is the advantage that well-selected students at the post-graduate level are mature people who can accomplish a great deal by individual study, and in a short time much factual knowledge and experience can be gained in this way.

Such practical training should be carefully selected, and the educational activities should be the result of close planning with the health administrators and their staff in order to provide joint technical help, guidance and super-

vision to the students. It is important also to take into consideration the needs and interests of the students and their special abilities or skills, and to allow time and opportunity for periodic evaluation, by teaching staff and students, of their combined efforts.

The health education specialist should acquire through his basic education and post-graduate training:

- (a) a high degree of competence in the major subjects outlined above and discussed in the preceding chapters of this report;
- (b) as thorough an understanding as possible of the importance and implications of cultural, economic and social influences in relation to health;
- (c) special competence in planning, organization, administration, evaluation, etc., of health education aspects of health programmes;
- (d) the ability to give technical leadership in planning and conduct of health education training for health workers and workers in closely related fields (content, methods, planning, etc.);
- (e) skill in giving technical guidance and consultation on planning, preparation, pre-testing, production, and use of visual materials;
- (f) the ability to assume technical leadership in co-operation with others in planning and execution of studies, and research on major health education problems;
- (g) thorough knowledge of educational principles and methods involved in planning and arranging of seminars, conferences, meetings, courses, teaching units, etc.

The degree or diploma awarded at the end of this training programme will vary in different countries, but it is in the best interests of both the countries they serve and the health education specialists that the training should be maintained at the graduate or post-graduate level and should be an education in the fullest sense.

The health education specialist who is not fully familiar with public health concepts, or adequately equipped with educational skills, will find difficulty in being accepted as a new member of the health team, particularly when he is called on to give consultative advice and guidance in health education to his fellow workers. Besides, it is usually more economical in most countries to employ a few well-trained health education specialists on a higher administrative level (national, provincial or state, and regional) than a number of less-experienced workers on the local level. In this connexion the Committee endorses the views expressed by the First Inter-American Health Education Seminar held in Peru in 1957 to the effect that the employment of special health education auxiliaries in those countries where they are considered necessary be regarded as a temporary measure while the required numbers of professional health education specialists are being prepared. Specialized health education

auxiliaries so employed should fulfil basic requisites for admission to professional health education training in a school of public health, and there should be possibilities for them to obtain this training.

8.4.8 In-service training and refresher courses

8.4.8.1 In-service training

Training courses for existing health service personnel engaged in their various spheres are of special interest. These may be held occasionally, lasting two or three days, or regularly during working hours for people in local service units. They can be organized by the unit itself or by outside bodies and, if well-prepared, can excellently fulfil the three principles outlined below. In general, it is well to remember that people who hold jobs are likely to have immediate and practical reasons for taking a particular study course.

- (a) All grades of staff should be included, if possible simultaneously. Those in executive and administrative positions need to be fully conversant with the capabilities, limitations and expectations of the field worker. Though there is often apprehension over mixing doctors, nurses, administrators and auxiliaries in the same course, with proper planning it can work satisfactorily.
- (b) The participants should really feel that the matter studied concerns them directly in their professional work. Study should start from practical problems within their experience, and any theoretical considerations should arise from these. Any action discussed must be action, they, as individuals or members of a team, could take.
- (c) Attention must be paid to the personal and status relationships between the individuals involved—the students, members of the staff and authorities sponsoring the course. These factors may act in appositive way, stimulating intellectual activity and at the same time building up a team feeling. If neglected, they may have a negative effect, producing isolationism, insecurity and apathy, which will greatly affect the value of any learning.

8.4.8.2 Refresher courses

The refresher course or seminar is essentially an occasion for bringing technical information up to date, and sowing the seeds of new ideas for people who are responsible for their own work and already concerned with, and experienced in a particular job. In health education it can be an occasion when a variety of professional people in the health and welfare services get together to discuss their work with colleagues. In these circumstances, some central location where the necessary highly-qualified

tutorial staff and equipment can be easily assembled must be selected. The problems dealt with are usually general, and much time is provided for formal and informal discussion.

Though the social problems in such meetings are quite as important as in in-service training courses, they are different. The participants may be strangers to each other and are away from home. The organizers should therefore exert themselves to facilitate social intercourse, because much of the value of such meetings is the personal exchange of views outside working sessions. For these reasons numbers preferably should be limited.

The content should focus on new ideas and information and should cover any recent research in the field chosen. As the aim is purely to stimulate the participants intellectually, no decisions need be taken, and widely-ranging discussions should be encouraged that will broaden mental perspective and imagination. Opportunity can be provided for participants to demonstrate their methods and be criticized by their colleagues. New materials should be on exhibition from home and abroad.

General cultural activities such as visits, concerts, films and lectures on subjects of general interest by people outside the immediate professional circle are of value in providing perspective, and in relieving the tensions and frustrations inevitably generated when people are gathered together in a group.

9. FURTHER STUDIES

The Committee recognizes that health education concepts, principles, and methods are already being incorporated in the professional education of doctors and nurses. It feels, however, that there is an important need for obtaining more information, and proposes that studies be encouraged on a world scale to ascertain in more detail what preparation for health education is being provided in their basic education and how this is being done.

Study, planning and development of long-range schemes for training of all health workers in health education and for the preparation of professional health education specialists should be encouraged. There would be considerable value in stimulating comparative studies and international exchange of information on the plans, methods, experiences and results achieved by various countries.

The Committee proposes that WHO, in close co-operation with UNESCO, the International Union for Health Education of the Public, and with other relevant specialized agencies and organizations, should explore the prospects for compilation, publication and dissemination of technical information on the following:

- (1) significant studies in research work in health education and closely allied fields of particular relevance to the improvement of health education training, and
- (2) the methodology used in carrying out special studies and research work on health education problems, methods, and procedures.

There would be considerable value in carrying out an investigation of the studies and research work now being done as a basis for determining in what aspects of health education further studies and research work are recognized to be of particular importance.

The Committee reaffirms that one of the important aims of health education training for health workers is to foster the attitudes, knowledge and educational skills which can help them:

- (1) to enlist the confidence and participation of individuals, families and community groups in helping to solve their own problems, and
- (2) to work effectively as members of the health team and with the wider team of workers and agencies concerned with the promotion of community development.

Studies should therefore include information as to what is being done to integrate training efforts in health education with broader training efforts required for promotion of community development in its widest sense.

Particular attention is drawn to the valuable contribution of school-teachers and of the importance of preparing them for their health education role with school-age children, parents, and the community at large. It is recognized that one cannot "teach health" as an abstract subject, without reference to health habits which are practised both inside and outside the school. The Committee notes with satisfaction that WHO and UNESCO have co-operated in the preparation of a Study Guide on this problem. They note that this Guide is designed to assist national authorities and workers in education, health services, and teacher preparation to study local and national needs and present practices, and to develop future plans for strengthening teacher preparation in health education. The Committee underlines the importance of fostering a unified approach in school health, health education, and public health in order to promote the health of the child as an individual within the total context of the home, school, and community environment.

10. SUMMARY

Much of the discussion in this report is focused on the scientific background and technical aspects of training. By this means it strives to balance the needs of all health workers for preparation in health education with those of people specializing in this work.

The Committee appreciates that the application of some of its findings will result in the establishment of a cadre of a new profession of health education specialists equipped with skills and influence of a far-reaching character. The importance of the relation of these specialists with the public and with other members of the health team has been emphasized. With the growth of the profession and the increase in its effectiveness, the ethical aspects of its practice take on new dimensions.

Health education can influence the lives of people for many generations. The ethical responsibility of all who practise it is therefore profound and can best be assured by careful selection and training.

Annex

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EVIDENCE OF EFFECTIVENESS OF HEALTH EDUCATION

The Committee discussed whether the existing evidence showed that health education, skilfully carried out, was effective in reducing or preventing ill-health. Reference was made to the following.

1. Analysing the effect of specific health education in infant mortality among families attending the Pholela Health Centre in Natal, Kark & Cassel 1 report that a comparison was made between two comparable groups receiving full clinical and preventive services from a polyclinic, the one with intensive health education ("old" families), the other with routine "case" advice ("new" families).

Totals of infant mortality rates for years 1942-46

			" New" families	"Old" families
Infant mortality (expressed as a percentage of live births)		24.20	(standard error 2.70)	11.25 (standard error 1.17)
Difference between "old" and "new"	=	12.95		
Standard error of difference	=	2.94		
Difference Standard error of difference	=	4.40		

- "Since 1940 all the families considered in this analysis have had free access to all facilities of the service which have been gradually developed at the Centre itself. After incorporation in the scope of the family service they ["old" families] have continued using these facilities, but a change has taken place in their own homes... By this programme the emphasis of the service is modified from what is done for patients to what the family or community does for itself...
- "While the health education programme is presented in simple form, it requires considerable skill and patience and to this end the specially trained health assistants are directed by the medical officers in charge of the Health Centre practice."
- 2. In a report to the Lancet,2 Charlotte Naish, a general practitioner in England, reports on the use of the hospital admission rate for children as an index of the effect of parental health education. She found that, after setting up a patients' club for fathers and one for mothers, the rate

¹ Kark, S. L. & Cassel, J. (1952) The Pholela Health Centre: a progress report. S. Afr. med. J., 26, 101, 131

² Naish, F. C. (1954) An experiment in family practice within the National Health Service. Lancet, 2, 1342

of admission to hospital of children under 11 years went progressively down in five years from 2.6% to 0.4%. Talks and discussions in these clubs covered such subjects as infant care, juvenile delinquency, the early signs of illness, when to send for a doctor, how to nurse a sick child at home, how to prepare a child for admission to hospital, the function of child guidance clinics, and much else designed to improve the relationship between doctor and mother and child. The fathers got a better view of the mothers' difficulties, and of the pleasure to be derived from giving help in the home.

3. Since 1944 an after-care programme of education for diabetics discharged from Cardiff hospitals ¹ has been operated by health visitors, "because it was found that diabetic patients who had received successful treatment in hospital were unable to maintain it at home, and were not infrequently readmitted because their diabetic education had been inadequate". Teaching covers urine testing, diet and cookery, injection technique, care of the feet, and general discussion of the diabetic's problems. The result has been a dramatic reduction of return cases of coma and gangrene, and in the need for attendance at hospital out-patient departments.

The Health Visitor responsible for the programme remarks "This work brings increased happiness to the patient, his home and his family. It lessens their financial and other worries, helps industry by reducing absenteeism and saves hospital beds for urgent cases."

- 4. Bogolepova ² describes the work of S. B. Tokar who carried out an interesting evaluation of the health education content of induction courses for apprentices in Russian factories, and noted the changes in behaviour resulting from different methods used. A similar comparative study was carried out by Zabolotskaya on gastric ulcer patients with regard to their regime and the health education methods which resulted in clinical improvements.
- 5. In Glasgow the acceptance of mass radiography and diphtheria immunization has been shown to depend on the extent and care in preparation of the health education programme.³
- 6. Bond ⁴ describes a project which was designed to study the effectiveness of two methods of education, (1) lecture and (2) group discussion-decision in an educational programme concerned with breast self-examination for early signs of cancer. The two most important criteria of success

¹ Davies, M. (1948) In: Royal Sanitary Institute Congress Report, London

² Bogolepova, L. (1956) Scientific research in health education. Hlth Educ. J., 14, 63

³ Glasgow X-ray campaign. Brit. med. J., 1957, 1, 1013

⁴ Bond, W. B. (1956) In: Minneapolis Department of Health, Group discussion-decision, Minneapolis, Minn.

designated for this study were whether the women secured a breast examination by their physicians and/or established the habit of regular monthly breast self-examinations. The findings of this project indicate that there was a significant difference favouring the performance of the women in the group discussion-decision experimental group.