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Report of a WHO Expert Committee

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CONTENTS

1. Introduction 5
2. General considerations 8
3. Standards for an effective health education service . . . 14
4. Planning and evaluation of a health education service . . . 24
5. Guiding principles for evaluating various aspects of health education 26
6. Suggestions for further research 29
7. Summary 30

Annex. Interrelationships between health planning, evaluation, and problem solving 32

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Geneva, 28 November - 4 December 1967

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Wld Hlth Org. techn. Rep. Ser., 1969, No 409

PLANNING AND EVALUATION OF HEALTH EDUCATION SERVICES

Report of a WHO Expert Committee

A WHO Expert Committee on Planning and Evaluation of Health Education Services met in Geneva from 28 November to 4 December 1967.

Dr P. Dorolle, Deputy Director-General, opened the meeting on behalf of the Director-General, and welcomed the members of the Committee and the representatives of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Union for Health Education.

Dr Dorolle stated that, as demonstrated by experience in various parts of the world, one of the main functions of education for health was to focus attention more specifically on the implications of individual human and social factors in the successful planning and execution of many priority health programmes. When making plans for various health and related technical services, there was also considerable need and scope for far more systematic appraisal of the precise nature of the part that could be played by the general public.

Ato Hailu Sebsibe was elected Chairman; Dr R. A. Noordin, Vice-Chairman; and Miss Mary Jo Kraft, Rapporteur.

1. INTRODUCTION

Since 1954, WHO has published four technical reports dealing with various aspects of health education. The Committee believed that some highlights of these reports would serve as a useful introduction and background to its own deliberations.

1.1 Purposes of health education

The first report, by an Expert Committee on Health Education of the Public, defined the purposes of health education as follows : " to

make health education a valued community asset "; " 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 " to promote the development and proper use of health services." [1]

1.2 Objectives of preparation of health personnel in health education

In the second report,[2] another WHO Expert Committee pointed out that the preparation of health personnel for their education functions needs to be planned in relation to the above aims of health education. The main objectives of health education training for the various categories of health workers were stated as follows :

(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 the health programme;

(6) to stress, as appropriate, the necessity of individual effort and teamwork for the realization of effective health education.

In addition, the report specifies as the main objectives of training for health education specialists, the following :

(1) to establish professional standards...

(2) to prepare specialists with the highest posible technical competence and skill for responsible leadership posts involving health education planning, organization, methodology, training, studies and research.

1.3 Teacher preparation for health education

The third report [3] was prepared by a joint WHO/UNESCO Expert Committee and was concerned principally with the preparation of elementary and secondary school teachers for their part in the health education aspects of the school programme. The items covered included teacher

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[1] *Wld Hlth Org. techn. Rep. Ser.*, 1954, No. 89, 5.

[2] *Wld Hlth Org. techn. Rep. Ser.*, 1968, No. 156, 7.

[3] *Wld Hlth Org. techn. Rep. Ser.*, 1960, No. 193.

attitudes toward health and health education, teacher opportunities for health education, the situations in which school health education takes place, and subjects especially important for the teacher. With respect to teacher training, the report stated (p. 16): "It is desirable that one person in each teacher training institution should be responsible for the co-ordination of courses and activities in health education ... Persons assigned this responsibility should preferably have professional preparation and experience in health education and in the principles and practice of school and community health." The Committee noted with satisfaction that the importance of health education in schools was also emphasized in a special report [1] prepared by the International Bureau of Education and UNESCO for the thirtieth session of the International Conference on Public Education.

1.4 Professional preparation of the health education specialist

The fourth report [2] is the outcome of a PAHO/WHO Inter-Regional Conference on the Postgraduate Preparation of Health Workers for Health Education. It sets out the main objectives of postgraduate studies in health education for all health workers, including health education specialists, puts forward ideas on course content, and suggests methods of academic instruction for postgraduate education and of extending academic instruction to field experiences and programmes. The report defines the major functions of the health education specialist as follows:

(*a*) analysis, study and educational diagnosis of the health problems in the community;

(*b*) planning the educational aspects of programmes, including determining the objectives to be achieved — particularly with reference to needs for desirable changes in health practices — identifying and assessing resources, and involving in the planning those who will be expected to implement the programme;

(*c*) the implementation of the educational aspects of the programme;

(*d*) preparing other health personnel in health education; and

(*e*) evaluation of the health education aspects of the programme.

With respect to the last of these functions — evaluation — the report suggests the following sequence of activities:

(1) analysis and logical ordering of the steps to be taken and of the conditions necessary for attainment of the programme objectives;

[1] International Bureau of Education and UNESCO (1967) *Health education in primary schools*, Geneva & Paris (Publication No. 304).

[2] *Wld Hlth Org. techn. Rep. Ser.*, 1964, No. 278.

(2) deciding to whom the programme should be directed, what kind of information should be supplied, and what educational efforts should be undertaken to produce needed changes in existing health practices and attitudes;

(3) determining the kind of evaluation desired, e.g., evaluation of progress, effort effectiveness of community or agency action, performance, partial or complete attainment of an objective, or other aspects of programme operation;

(4) appraising the reliability of instruments to be used in measuring results and the validity of the measurements.

2. GENERAL CONSIDERATIONS

2.1 What is health education ?

The focus of health education is on people and on action. In general, its aims are to persuade people to adopt and sustain healthful life practices, to use judiciously and wisely the health services available to them, and to take their own decisions, both individually and collectively, to improve their health status and environment.

The degree to which these goals can be achieved is determined by a series of interrelated factors :

(*a*) the accessibility of health advice and health services in which the individuals have trust;

(*b*) the economic feasibility of putting into practice the health measures being advocated;

(*c*) the acceptability of the proposed health practice in terms of the customs and traditions that the individuals, families, and groups observe, the beliefs that they hold, and the attitudes of their peers;

(*d*) the extent to which people already have the kinds of learning experience needed to enable them to understand or to desire the benefits to be derived from a new or modified health behaviour, which may often require a considerable personal sacrifice of a financial, social, or psychological nature.

It is imperative, therefore, that all health workers and others who are involved in health education recognize that the attainment of changes in health behaviour is conditioned by social, psychological, and economic realities and by the quality, amount and availability of health services. Concomitantly, it is essential for those involved in health services to recognize that the degree to which health policies and plans become

meaningful and health programmes fulfil their purpose, is determined largely by the actions of the consumers for whose benefit and welfare they are intended.

There is no one right or easy way to " educate " people to be interested in changing their health behaviour or in environmental improvements. Yet, people at all levels of society must be so " educated " if maximum returns are to be realized from the investments a nation makes to raise the health standards of its people, to reduce or to eradicate major health problems and hazards, and to promote vigour and well-being.

2.2 The need for health education

Winslow defines public health as " the science and art of preventing disease, prolonging life, and promoting mental and physical health and efficiency *through organized community efforts . . .* "[1]

Countries throughout the world have developed various health services and programmes to improve the health status of the people, but " organized community effort " has lagged behind. One reason for this is the tendency to forget the human element — the " consumers " — when health programmes are planned. Non-participation by those for whom the programmes are intended results in loss of time, effort, and money, and the problems remain unsolved.

Many governments are now beginning to realize that the services and facilities they provide to improve the socio-economic and health status of the people will not be fully effective unless the people not only make use of these services but also undertake various practical self-help measures to improve their own health status and that of the communities in which they live. This is a main aim of health education.

2.3 Type and magnitude of health programmes

In order to plan the educational and related social aspects of health programmes, the health education service needs to know as precisely as possible what the health problems are, the magnitude of these problems, what factors affect the health of people, and the health status of different sections of the population. Collaboration with other programme directors and staff in the collection of such data provides opportunities for the health education service to bring to the attention of their colleagues the behavioural aspects of the health problems. For this and other reasons, it is essential for the health education service to take part in collecting data about the prevailing health situation of the country.

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[1] Winslow, C.-E. A. (1920) *Mod. Med. (Minneap.)*, **2**, 183.

Vital statistics [1] including morbidity, mortality, natality, fertility, and longevity are among the data needed. In some countries, the statistical data may be lacking or be incomplete or inaccurate. Every effort should be made, nevertheless, to acquire all information possible and to seek clarifications with regard to its accuracy and correct interpretation. It is not, of course, necessary to await the availability of precise statistical information on all major health problems before making plans to develop the health education aspects of health programmes. For sound planning, the health education service must also have information about such factors as status of literacy, languages used, economic conditions, important local practices, available health services, and transportation facilities.

2.4 Organizational pattern, coverage and adequacy of health services

As noted elsewhere in this report, the health education service may be in a country where very limited health services are available to the rural populations, or in one where the system of local health services is much more extensive. In either instance, certain information is pertinent to the planning of a health education service and the educational components of health programmes. It would be important to know, for example, the details of health programmes at all levels, including objectives, targets, phases, time schedules, categories of staff available, numbers in each category and where located. The same type of information about other health agencies, official and voluntary, would be useful also, for each worker and each programme is a potential resource for health education.

In determining the number of health education specialists and other related categories of personnel that will be needed, the planners must take into consideration not only the organizational pattern and structure of the official health agency, but also requirements for strengthening health education in programmes of many other agencies.

2.5 The magnitude of the health education problem

Every country has its health education problems. This is as true in countries where the major health concern is disability and death caused by degenerative diseases as it is in others where the major problems are communicable diseases and high infant mortality.

Even when health services are readily available, the social and cultural characteristics of the population can present very serious barriers to the

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[1] These should be reported in accordance with the recommendations given in the eighth revision of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*, Geneva, WHO, 1967.

achievement of health behaviour change. Among these characteristics are illiteracy and low educational level, economic and social class differences, variations in language within a country (or even within an area of the country), a low degree of civic responsibility and community consciousness, traditional dependence on the government to identify and solve all problems, the emigration of the educated minority from rural to urban areas, the low opinion of the government employee held by some sections of the population, and unsound health beliefs and practices rooted in superstition and folk medicines.

In most countries, a majority of the health and other community service workers have had little or no opportunity for planned and systematic health education preparation. The dearth of qualified and experienced health workers, including health education specialists, places practical difficulties in the way of improving the present situation. Many health workers still believe that good health is a conscious desire of people and if they can just be told what to do, their behaviour will change accordingly.

A function of a competent health education specialist is to assist in identifying educational barriers, such as those described above, that impinge upon or create health problems so that this knowledge can be taken into account when health programmes are planned.

2.6 Existing attitudes towards the value of health education

For the individual to learn and practise good health habits or to change bad habits involves considerable personal effort and self-discipline and there are often strong opposing forces at work.

Combatting the vast amount of misleading health information used for commercial or business gain presents a formidable task for all health workers. For example, pitifully small amounts of money are available to health education to offset the advertising campaigns of tobacco manufacturers or the specious health claims made in advertising certain kinds of " health foods " or " patent medicines ". *Ad hoc* health education campaigns directed against such opposing forces can rarely be of lasting value. The need is for planned health education, sustained over long periods of time and directed towards a healthy way of life throughout the whole life span.

Effective health education of the public contributes to the achievement of a country's development goals by producing a more conscious, self-reliant, responsive, and responsible people in matters relating to the prevention of disease and the preservation and promotion of health. A healthy population can be more energetic, alert and productive in the socio-economic life of a country.

The Committee suggests, however, that the potential of planned health education in achieving health goals is still not fully understood. In many instances, education for health is something to be thought of when expected results from programme efforts are not attained.

Because of the impression that " information giving " is the primary aim and function of a health education service, its activities often remain confined almost entirely to publicity. This impression is regrettable because the health education service can, in fact, as many health administrators recognize, provide the " cement " that binds together the " bricks " of the health programme, particularly through enlisting the active participation and action of the people in health improvements.

The methods of education for health are unfamiliar to some health workers, and even such elementary statements as " learning is an active process " can sound formidable. Some of the workers are impatient because health education seems to take place so slowly or appears to them to be intangible, imprecise, and too complicated. Because the results of health education are not readily or quickly apparent, there is some justification for regarding it as a slow and complex process. Health workers, like all other people, assess the benefits to be derived from something new against their own past experiences. It is important, therefore, for those involved in planning a health education service to keep in mind that what health administrators and other health workers know, believe, and expect of health education has been learned in many different ways and circumstances. All people select what they want to learn in the light of their past experiences and they are influenced in this selection by the attitudes, beliefs and practices of their colleagues and peers. This applies as much to selection of radio or television programmes as to selective reading. Similarly, people's acceptance of new ideas will be largely determined by what their past experiences have taught them to believe. It is desirable that these facts, true of people everywhere, should be borne in mind by those planning and developing a health education service, as well as by those who plan and carry out health programmes. In the final analysis, the achievement of many health and related social goals is determined by the behaviour of people. The mere wishing that attitudes and behaviour will change is unproductive; planned action is required.

2.7 Prevailing concepts regarding health education methods

In planning the health education service, it is important to take into consideration the prevailing concepts of various personnel who would be concerned with formulating the service, administering it, and directing its efforts, as well as the expectations of those who will be the consumers. As a result of recent research, particularly in education and related social

science fields, many new methods are now known to be effective in education for health. However, owing to inadequacy of communications and to other reasons, these methods and techniques are not yet widely enough known among workers in health and related programmes. Consequently, it is still commonly believed that health education is mainly concerned with the dissemination of information, particularly through the mass communication media.

The Committee noted with satisfaction that the role of health education in achieving community participation was particularly emphasized by a WHO Expert Committee convened to consider National Health Planning in Developing Countries.[1] In conjunction with other developments, this was taken to indicate that there is a trend toward increased understanding of effective methods of education for health. The Committee believes, nevertheless, that much more needs to be done to ensure that the emerging modern concept of health education, placing emphasis on health behaviour and related actions of people, is more widely known, accepted and used in planning health programmes.

2.8 Resources available to the health education service

The resources in men, money and material actually available have a direct bearing on planning the development of a health education service and on its functioning.

In addition to its own resources, the health education service may be able to obtain financial and other assistance from universities, professional societies, voluntary organizations, and governmental agencies, including education authorities and others concerned with the promotion of community development. The contribution of these groups to health education should not be underestimated. A health education service should compile and maintain a directory of such organizations, indicating aims, functions, structure, personnel and other resources of each. Such information is invaluable in planning and implementing the health education and related components of health programmes.

In addition to the resources mentioned above, most countries have long-established social and cultural methods of communicating ideas, experiences, and information through art, drama, singing and other means. Such channels are often effective in communicating health ideas and desired health practices.

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[1] *Wld Hlth Org. techn. Rep. Ser.*, 1967, No. 350, 21.

3. STANDARDS FOR AN EFFECTIVE HEALTH EDUCATION SERVICE

3.1 Emphasis on the human element

The Committee emphasized that, when considering criteria for the establishment and functioning of a health education service, it is necessary to focus attention on the human element, for people are at the heart of every public health concern. Health problems are human problems, and people try to solve them in different ways and by various means. Illness often creates financial difficulties, not only for the patients themselves but also for their relatives, particularly when the sick person is the head of the household. People may perceive their own health problems quite differently from the health workers who attend them. It has also to be remembered that the men and women who staff and administer the health services have their own personal problems and family needs. In short, human beings, with their aspirations, beliefs and behavioural patterns, are the common denominator of all health problems and all health programmes. Thus, it is essential to have information about people's knowledge, attitudes, customs, habits, aspirations, and beliefs as a basis for planning the health education service within the context of national health and related programmes. Further, the Committee considered that, whenever practicable, the people should be consulted and involved in the process of collecting this information. It was noted that in the past those planning the various health services had frequently given very limited attention to the attitudes and living practices of the people and to their needs and concerns.

3.2 Organizational aspects of the health education service

While recognizing that a health education service might exist or be established in organizations other than the official health agency of the country, the Committee believed that this did not in any way diminish the need for an adequate health education service in the national ministry or department of health of a government.

An important factor for the effective functioning of a health education service is the position it occupies in the administrative hierarchy of the ministry of health. This should be at a level high enough to permit the director and staff of the health education service to work directly with the directors and staff of all other technical programmes and service units of the health organization. It is desirable also that the director of the health education service be directly responsible to the permanent head of the national ministry or department of health. In any event, some form

of direct representation in the national health administration is essential to the effective planning and achievement of the agency's health goals and for the progressive development of a viable health education service.

It is desirable that the service should be so placed administratively that all technical programmes have ready access to it. When this is not the case, a health education service tends to become identified with a particular segment of the health agency's activities and, therefore, can seldom fulfil its technical obligations to the agency as a whole. This is not to say that individual programmes may not require full-time health education staff (see page 16).

There are other reasons for placing the central health education service at a high level in the organizational structure of a government health ministry. Only recently has health education gained acceptance as a fundamental public health method and as a needed technical service. In some instances, it is still considered a marginal activity and is treated as such, greatly to the detriment of the health programmes concerned. There is no doubt that a great deal needs to be done to raise the status of health education and to promote its role in enlisting the desired action and support of people in various health and related programmes. One way to achieve this is for the administration of health ministries and departments to give the health education service a more conspicuous position in the organizational structure — in other words to place it at an administrative level that conveys to other health services the importance that the ministry attaches to health education. At the same time, of course, the service will require the right administrative backing to enable it to carry out the technical functions for which it was established, i.e., to support through planned education for health the established policies, programme goals, and priorities of the health agency and to foster its co-operative efforts with other agencies, organizations, and the public at large.

The Committee also discussed the placement of health education and related social scientists at various levels : national, intermediate, and local. In some countries, the planning and direction of health services is the responsibility of the ministry of health, which provides services to the people through health units at the local level, with no intermediate organization. In other countries, major responsibility for health policy determinations, and the planning as well as implementation of health programmes, rests with the local community. Alternatively, these decisions may be taken at an intermediate administrative level. Obviously, with this kind of variation it is impossible to suggest patterns for placement of staff, for what may be desirable or effective in one system may not be desirable or effective in another. The Committee believes, therefore, that it would be more useful to suggest the following guidelines to help countries plan the most effective use of staff.

1. The possible needs for assigning health education specialists, social scientists, and other personnel at various administrative levels of the health organization must be taken into account.

2. The services of a health education specialist and related social scientists are desirable at every level where health policy determinations are made, where significant programme planning takes place, and where significant health training for health workers and others is provided.

3. It is important that all health workers should have continuing opportunities to develop skills in the use of health education methods and should be kept up to date regarding newer concepts and techniques. It is undesirable for health education specialists to be placed at peripheral levels in the organizational structure, where the functions they would perform are ones that should be the responsibility of other health workers or of related personnel, such as school teachers and other community workers.

4. Many countries are engaged in nationwide efforts to eradicate malaria and smallpox, to promote community water supply programmes, and to extend maternal and child health services. The educational problems encountered in these specialized programmes have prompted some health administrations to set up separate health education units within the respective special programmes concerned. In such instances, it is highly important for these health education units to have a direct technical relationship with the central health education authority of the health ministry. In fact, it is considered desirable that the overall technical planning, organization and direction of the health education aspects of these specialized programmes should be the responsibility of the central health education service. This would help to ensure that comparable technical and administrative standards for recruitment, training, and employment of health education staff are maintained throughout the health organization. It is important, therefore, that the personnel requirements of specialized programmes be taken into careful account when plans are being made for the development of a health education service.

3.3 Functions of a health education service at the national level

A health education service should be expected ultimately to assume all the functions listed below. Obviously, a newly established service would not be in a position to undertake all the functions effectively. The priorities to be assigned to the various functions will depend on the health agency's plans and policies, on the level of existing health services, and on the ability of the health education service to carry out the work.

When embarking on new activities the health education service should be mindful of their long-range implications. Activities that may seem

expedient at the time may in the long run have very adverse results because they are not based on sound principles of health education practice.

3.3.1 *The early stages of development*

As guiding principles, the Committee suggests that a newly established health education service should perform some or all of the following functions :

(*a*) demonstration of health education skills in various situations, especially if the health agency has had no previous contact with professional health education personnel;

(*b*) provision of orientation and training in health education for health workers, including those already in service, priority being given to the training of health personnel holding key positions in training institutions or in other programmes concerned with training;

(*c*) provision of orientation and training in health education for school teachers, agricultural extension workers, social workers and other community development workers, giving priority, wherever possible, to working with and to providing training for those who are responsible for training and those in leading positions of influence;

(*d*) collection of information about resources for health education;

(*e*) collection of information about the people's knowledge, attitudes, and practices related to the health problem under study;

> Particularly at the early stage of development of the health education service, information of this type might appropriately be obtained from others who have carried out such studies. In time, the health education service could begin to collect information through simple studies as a part of training. Later, more comprehensive studies could be undertaken to collect information of this type for planning and training.

(*f*) development of basic health education materials needed for use in the health programme;

(*g*) initiation of a precise, long-range plan for staffing the health education service, if this has not already been done;

> The plan should include :
>
> (i) estimates of the number of health education specialists, related social scientists, and other personnel required to form the cadre of the service,
>
> (ii) technical standards for basic qualifications,
>
> (iii) training requirements for pre-service and refresher training,
>
> (iv) resources for training health personnel and others in health education;

(*h*) management and direction of the short- and long-range development of the health education service in accordance with the health problems, policies, priorities, and services of the health ministry or department.

3.3.2 *Later stages of development*

In the later stages of development of a health education service the following functions might be added :

(*a*) identification and analysis of the educational implications to be considered in the formulation and modification of the agency's health goals, operational policies and plans;

(*b*) evaluation of the health education objectives and requirements of national health programmes and helping to plan the health education activities needed to achieve these objectives;

(*c*) assisting other health personnel to select appropriate educational methods and approaches in the planning and conduct of continuing education and various other types of education and training programmes;

(*d*) assisting staff within the agency to keep abreast of new developments in health education methodology and related fields of education, social sciences, and others;

(*e*) designing, testing, producing (or procuring), and distributing health education materials needed to support priority health programmes;

(*f*) participating with the relevant national educational authorities and their professional workers in planning the health education aspects of teacher preparation and school programmes and helping to plan in-service education programmes for teachers;

> Specifically, this includes participation in the development of the curricula for teacher training and school programmes; and helping to prepare the health content of text books, manuals, visual aids, and other teaching materials.

(*g*) identification of opportunities and ways in which the agency can collaborate in health education with other governmental agencies, professional associations, voluntary groups and others for the attainment of national health goals;

(*h*) encouraging universities, where appropriate, to establish special curricula or departments of health education and assisting them in strengthening health education in relevant existing curricula, such as medicine, social sciences, education, and others;

> Whenever possible, priority should be given to technical collaboration with medical faculties of universities in strengthen-

ing health education and related social sciences, especially in regard to paediatrics, dentistry, and social and preventive medicine.

(*i*) preparation and implementation of the staff development plan, making necessary adjustments in the light of changing situations and evolving needs;

In particular, it would be desirable to make provision, when required, for extending the health education service to other administrative levels of the health organization. In addition, provision should be made for professional education and for refresher courses of study to enable the health education staff to keep up to date;

(*j*) planning and execution of a sound programme of supervision to provide opportunities for the development of health education services, as well as for the professional growth of the specialists in health education, related social sciences, and other branches of the health services;

(*k*) designing, co-ordinating and conducting field studies in behaviour, health education concepts, methods and media relevant to health education practice and provision of training in the conduct of such studies;

(*l*) identification of problems in health education needing studies and research and promotion of studies and research by universities and other competent groups;

When resources are available, the health education service may find it possible to undertake studies and research in close collaboration with directors and staff of various other technical programmes of the health agency and of related technical services.

(*m*) interpretation to the public of the problems, plans, programmes and achievements of the health agency through appropriate channels of communication such as the press, radio, television, libraries, and professional publications, including journals specially prepared for this purpose;

(*n*) promotion of technical co-ordination and collaboration with the international, multilateral and bilateral governmental and non-governmental agencies in the health education aspects of health programmes with which their respective health ministries or departments are co-operating.

3.4 Organizational structure of a health education service at the national level

The health education service at the national level should have an organizational structure appropriate not only to its own stage of development but also to the needs, plans, programmes, organization, and

resources of the total health service, in order to assure effective fulfilment of such basic functions as planning and evaluation, supervision and consultation, training, public information, and development of audiovisual materials. This does not necessarily mean that there should be separate functional units for each of these aforementioned basic functions. The emphasis should be on careful assignment to staff of priority functions, rather than on setting up an unduly complex organizational plan for the health education service.

3.5 Functions of a health education service at intermediate levels of health administration

The functions of a health education service at intermediate or other administrative levels would follow the same general pattern as those suggested above. However, they would be fewer and, as indicated below, greater emphasis would be given to those that are of a service nature, particularly with regard to planning and training.

The Committee suggests that relevant and realistic functions at intermediate levels would be as follows :

(*a*) planning the health education components of health programmes;

(*b*) provision of planned and organized health education activities in connexion with the various health programmes;

(*c*) provision of courses in health education for health workers, teachers, and other related community development workers of various official and voluntary agencies;

(*d*) assisting in the planning of educational responsibilities of health and related personnel and aiding them in discharging these responsibilities;

(*e*) assisting in integrating health education into the curricula of schools, teacher training institutes, colleges, and universities;

(*f*) provision of technical guidance to specialized health education personnel and other workers, as needed;

(*g*) mobilization of the resources of different official and voluntary organizations and co-ordination of their health education activities, with a view to the realization of the aims of the various health programmes;

(*h*) helping to plan, organize and conduct seminars, working conferences, and discussions for local leaders, in order to enlist their participation in the health programmes;

(*i*) dissemination of scientific health information through all channels of communication, especially the indigenous ones;

(*j*) promoting and conducting simple studies designed to help make health education aspects of local health work more effective;

(*k*) communicating the results of these studies and other relevant reports to the central technical health education services.

3.6 Organizational aspects of the health education service at the intermediate level

At the intermediate levels of the health administration, the health education service should have the same administrative status as the other technical units responsible for planning, evaluation, training, and other important programme decisions.

3.7 Establishment of priorities

Whether the health education service is newly developed or a long-standing one, it is highly desirable to establish a list of priorities. It is well recognized that systematic planning and a careful selection of priorities afford the best guarantee that maximum use will be made of the efforts of the health education service in support of the main objectives and activities of the various health programmes.

The Committee suggests that consideration be given to the following points in setting priorities :

(*a*) priorities may differ from country to country or even in various parts or local areas of a given country;

(*b*) priorities should be set up in consultation with the responsible health administration, the technical health education service and any other technical programme personnel concerned;

(*c*) priorities for health education activities should be geared to the priorities and plans established for the national health programmes and services;

(*d*) priority should be given, as far as possible, to those educational activities within a health project or health service that will produce practical and demonstrable results;

(*e*) problems that are comparatively easy to solve and do not make heavy demands on financial and technical manpower resources should also receive early attention;

(*f*) early consideration should be given to programmes that provide maximum opportunity for the people's participation and that help to increase their confidence in the use of various practical self-help methods;

(*g*) priority may also be given to projects that yield a high return for effort expended as, for example, the provision of training courses for trainers of health personnel, school teachers or other personnel in positions of influence;

(*h*) those activities that the health education specialist and other personnel can do effectively may be given a certain priority, particularly in a newly established service;

(*i*) efforts should be concentrated on as few problems as possible in the early stages of a developing health education service;

(*j*) the health education service must be flexible, so that the programme can be modified to meet health needs of an urgent or emergency nature.

3.8 Manpower requirements of a health education service

In planning a health education service, the planners need to take into consideration the number of health education specialists that will be needed to man the service at the national level, at intermediate and other levels of administration, as well as in specialized health programmes. A similar estimate of manpower requirements should be made for other categories of staff. Some of the factors that influence the numbers needed are : needs of priority health programmes of the agency; the organizational levels to which staff are to be assigned; and the number of related agencies that are to be served by the unit.

In addition to health education specialists, there may be need for specialists in related social sciences and in communications media, as well as for technicians and other personnel.

The contribution to health education that can be made by school teachers, social workers, and agricultural workers should be taken into consideration in determining staff needs. Since all these personnel will probably require training, supervision and support in health education, additional health education staff will have to be provided for this purpose.

3.8.1. *Personal attributes of the health education specialist*

The Committee attached considerable importance to the personal qualities and attributes desirable in candidates who are to be recruited to the health education profession. It noted that this question had previously been discussed by the PAHO/WHO Inter-Regional Conference on the Postgraduate Preparation of Health Workers for Health Education,[1] which had suggested the following as desirable attributes : (*a*) demonstrated leadership ability; (*b*) initiative and self-reliance; (*c*) intellectual qualities of an alert and inquiring mind — creative ability, imagination, and an experimental approach to problems; (*d*) an interest in social problems; (*e*) personal and professional integrity; and (*f*) tact and resourcefulness.

[1] *Wld Hlth Org. techn. Rep. Ser.*, 1964, **278**, 22.

3.8.2 *Educational qualifications*

Since 1949, participants in several WHO Expert Committees, technical discussions, seminars, and conferences concerned with health education have considered the academic requirements and experience desirable for professional personnel who are responsible for the technical planning, direction, and development of health education services of health programmes at various administrative levels. At these meetings, it has repeatedly been stressed that each country should have, as a minimum, a cadre or nucleus of qualified health education specialists, who should possess a university degree in biological sciences, social sciences or education, or the equivalent. Candidates not possessing any of these qualifications would not be eligible for admission to accredited institutions that offer academic postgraduate courses in public health with specialization in health education and the related social sciences.

In planning a health education service, it is essential to stipulate that the technical director of the service must be a professionally qualified specialist in health education.

3.8.3 *Professional opportunities and salary scales*

It is difficult to prescribe uniform criteria, applicable to all countries, for recruiting health education personnel. The Committee noted, however, that several earlier Expert Committees convened by WHO had already given considerable attention to the problems of evolving professional standards and establishing guidelines for the recruitment and training of health education personnel to be employed at different levels.[1]

Health education is a difficult full-time job. The salary and other benefits should be commensurate with the responsible duties to be discharged and with the qualifications of the health education specialist. There should be attractive scope for promotion and encouragement for professional growth. The qualities and academic attainment required of health education specialists equip them for many competing fields of work, to which they are likely to gravitate unless suitable conditions of employment and salaries are provided.

3.9 Budgetary needs

The health education service at the national or intermediate level should have a separate budgetary provision. This should cover allocations for specific functions of the health education service as well as for salaries and other staff expenses. It is apparent from a review of

[1] See, for example, the following reports : *Wld Hlth Org. techn. Rep. Ser.*, 1954, No. 89; 1958, No. 156; 1964, No. 278.

current practices that there are no indicators yet as to what constitutes the optimum financial allocation for health education.

When preparing budget estimates for a health education service, the planners should take into consideration such items as equipment purchase and maintenance needs, transport, and contingency funds for unforeseen priority demands that may arise.

Special national health programmes (malaria eradication, smallpox eradication, community water supplies, cardiovascular diseases, cancer, dental health, mental health, and others) may, and often do, have separate budget allocations. Careful consideration needs to be given to having a certain part of these funds allocated to the special education service needs of the various programmes. This calls for joint planning with the responsible directors of the programmes. Similarly, in programmes of the other ministries (education, agriculture, and others) financial provisions should be made for the respective health education activities.

Any money available from the local government bodies, voluntary organizations, foundations, industrial establishments and other sources, may also be included in the estimates.

3.10 Facilities and equipment

For efficient functioning of the health education service, adequate provision should be made in the plan for certain basic facilities, such as accommodation, technical equipment and transport for field work. If possible, the offices of the health education services should be in the same building as the health ministry or directorate, and suitable and adequate working space should be available for each unit of the service.

In addition to office space, some countries will need to provide residential accommodation for staff. In countries where accommodation is provided by the government, the health education specialist in charge should be entitled to staff quarters in accordance with his professional standing and the needs of his family.

4. PLANNING AND EVALUATION OF A HEALTH EDUCATION SERVICE

The planning and development of a health education service are affected by a variety of factors. Some of these relate directly to the health problems themselves, others to the health education aspects of these problems. Also important are the existing or potential resources for solving the problems. Because the situation is a dynamic one, those responsible for the health education service must be alert to the need to

adjust the functions of the service to the ever-changing patterns of health organization, the goals, policies and plans of health programmes, and the interests and recognized needs of the population.

4.1 Steps in planning a health education service

As a first step, the general aim of the health education service needs to be defined and then reduced to concrete, measurable objectives. Time limits should be fixed for the achievement of specific targets. The overall plan for the unit should be comprehensive, but set forth in as simple a form as possible. It should be flexible, phased, costed, and limited in time as regards each step. The plan should be fully acceptable to the health administration and to all others whose co-operation is required if it is to be successfully implemented.

The next step in planning is a well thought-out strategy for implementation. Interwoven appropriately in the plan would be the steps to be taken in evaluation.

Early in planning the following questions need to be answered :

1. What priority does the health administration give to the development of the health education service ?

2. Does the administration agree on the main functions that the service is to provide ?

3. Can qualified personnel be found to staff the service ?

4. Does the administration understand and accept the proposals regarding the various categories of staff required, the minimum technical qualifications to be maintained, recruitment methods, scale of remuneration, and plans for supervision, training and staff development ?

5. Is the salary that can be offered sufficient to attract qualified applicants to the positions and to retain them once they have received professional preparation ?

6. Will the professional staff be members of a recognized cadre of government service with promotional opportunities and other comparable benefits ?

7. Is there assurance that new positions will be created in accordance with a reasonable time schedule ?

8. Is there assurance that fellowships for training will be available as needed ?

9. Are there guarantees that facilities, equipment and transportation needs can and will be met ?

4.2 Reformulating objectives and targets

Obviously, unforeseen circumstances can and do affect the best laid plans, but when all the above questions can be answered affirmatively, it would appear that the objectives set have a reasonable chance of being achieved.

It is likely, however, that some measure of compromise will be involved in the answers to the nine questions. This will probably affect the targets that have been set and may even require modification of the objective. Once this has been done, the process of testing and assessing the chances of success starts all over again.

4.3 Implementing the plan and evaluating progress

During the implementation phase of the plan, the process of planning and assessment continues. Personnel must be recruited and trained. These two activities and many others will require planning and evaluation before decisions are made and action is undertaken.

Some indicators of progress in meeting targets would be : authorization of new positions by the date promised; recruitment of new staff, as authorized; approval of proposed increase in the budget; active participation of representatives from several programme units in the preparation of the new staff members; and approval of fellowships for professional study.

5. GUIDING PRINCIPLES FOR EVALUATING VARIOUS ASPECTS OF HEALTH EDUCATION

5.1 Purposes and meaning of evaluation of health programmes in general

Evaluation is the process of assessing the achievement of the stated objectives of a programme and it attempts to measure the adequacy, efficiency and acceptance of the programme by all parties concerned.

Health administrations are showing an increasing awareness of the need to plan and evaluate their programmes in a more systematic and orderly manner than in the past. The provision of health services is becoming increasingly costly in terms of money, manpower and other resources, and not even the countries most favoured economically can afford to waste scarce resources.

Systematic planning of a health programme with built-in evaluation processes offers the best hope not only of preventing waste but also of ensuring that the programme is adhered to and the targets reached. Evaluation can aid the health administrator in solving day-to-day problems

and reveal mistakes in the programme at the earliest stages, thus facilitating quick remedial action. [1]

5.2 Purposes and meaning of evaluation in health education

Insofar as education for health is a vital component of health programmes, it too must be subject to the process of planning and evaluation. Not only is this a relatively new concept but evaluation in the field of health education probably presents some of the most difficult of all evaluation problems. The purposes of evaluation have been ably summarized by Roberts : [2]

> We evaluate to aid future planning and to improve programs, to increase our understanding of health education practice, to add to the body of knowledge upon which our work is based. We evaluate to help achieve operational efficiency and, related to this, to obtain data that permit interpretation of program effectiveness so as to obtain administrative support, community support, even financial support. We evaluate for reasons associated with motivation — to give staff and volunteers satisfaction, and a sense of success. To give priority to these purposes . . . we evaluate primarily to study the effects of practice so that we can turn our findings back into practice and improve it and, at the same time, strengthen the scientific basis of practice in health education.

5.3 Difficulties encountered in evaluating results of health education efforts

Reference has already been made to health education being something more than the giving of health information and advice. *Inter alia*, it seeks to form good health habits in the very young and to change faulty habits; it, therefore, involves the complex and as yet unravelled problems of human motivation and behaviour, which do not easily lend themselves to quantification. Moreover, since the results of health education may be slow in appearing, there is plenty of opportunity for extraneous factors to influence the end results of the programme.

While it is obviously desirable that evaluation should be based on objective measurements using valid indices of achievement, at the present stage of development of health education services, quantification may be very difficult because of the large number of variables involved, shortage of skilled staff, and inadequate training in evaluation practices. None the less, continuous evaluation of a simple character — e.g., an assessment of mistakes or successes and the factors responsible — has great value from an operational point of view and is well within the competence (given the necessary supervision) of most staff engaged in health education

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[1] The interrelationships between health planning, evaluation, and problem solving are illustrated diagrammatically in the Annex on page 32.

[2] Roberts, Beryl J. (1962) Concepts and methods of evaluation in health education, *Int. J. Hlth Educ.*, 5, 3.

activities. The need is to relate the effort put into the project to the changes that have been effected with the resources available.

As the concepts and techniques of planning and evaluation become more readily acceptable, they are likely to be incorporated in all new health programmes or projects embarked upon. But there is also a need to evaluate existing health programmes and projects. Many public health programmes are continued long after their need has passed; others perpetrate mistakes or inefficiencies that go undetected for long periods of time. Evaluation offers the chance to correct these defects. Indeed, health administrations and their staff at all levels must be motivated in favour of evaluation, and be prepared to change their organizational structure and modify the functions or activities of their workers should the results of evaluation indicate this to be desirable.

Evaluation must therefore be undertaken not in a spirit of criticism but on an intelligent basis of co-operative team work and a great deal of time may have to be spent, through staff meetings, in-service training or in other ways, to gain acceptance of the concepts and possible consequences of the evaluation process.

5.4 Training for participation in evaluation

It is clear that training programmes for all health personnel should include instruction, and if possible practice, in evaluation concepts and techniques. Indeed, it is equally desirable and necessary to carry out evaluation in relation to training itself — an aspect of evaluation in which there can be considerable student participation.

An important question is " Who should do the evaluation ? " As already pointed out, health education is, or should be, a component of all health programmes. It follows, therefore, that the health education specialist must devise ways and means of evaluating the educational and related social components of the total health programme. In consequence, there should be discussions between the programme directors and the health education service before, during and after the programme has been completed, even though the evaluation of the efficiency of the total programme is the task of those responsible for it.

5.5 Methodology

The methodology that might be used in evaluation of health programmes has been outlined in a number of documents, but " project evaluation " and " impact analysis " seem to be particularly relevant to the field of health education. There are various factors that can make a health situation unsatisfactory. These include specific health factors;

public health factors; administrative problems; social factors, including the way people behave; and economic factors.

Evaluation can be carried out in terms of these five factors and can make planning more precise. Only an initial situation analysis can really lead to setting of targets. Evaluation is thus the basis for decision and action. Only when the situation is evaluated can one say what is needed to change it and how long it will take. To improve the efficiency of the programme, a set of criteria of good quality operation is formulated in advance, with an educational purpose in mind.

Impact analysis, i.e., assessing the impact of a health programme has three aspects :

(*a*) the specific, e.g., the effect on the tuberculosis situation of a tuberculosis control project;

(*b*) the " spillover " of a specific effect, which can have a beneficial influence on public health in general; and

(*c*) the socio-economic impact.

To assess the last of these, much research would be required.

Methods of the above kind offer scope for evaluation in the field of health education. At the operational level there is opportunity to assess the efficiency and impact of the health education component of public health programmes. At the central, specialist level, a synthesis of the entire health education experience within the public health programme can be made.

There are certain prerequisites for carrying out " cost-benefit analysis "

(*a*) a precise description of the health benefits of a health action so that one can begin to quantify them;

(*b*) knowledge of the costs and to what area they are limited; and

(*c*) information permitting a relationship to be established between certain well-defined costs and some properly delineated benefits accruing from health programmes.

It is clear that these three prerequisites cannot be established in the field of health education.

6. SUGGESTIONS FOR FURTHER RESEARCH

The Committee recognized that there is an important need for research that will help to illuminate problems encountered by health workers, educators, and others in the practice of health education aimed at securing the active participation of people in health and related programmes of a community development nature. Well planned and carefully conducted

studies could be of substantial importance in helping health administrations and technical health education services to improve planning and evaluation of the health education component of various national health policies, plans and programmes. In order to determine what educational problems or aspects warrant study, careful attention needs to be given to the priority health needs, available technical health services and resources, and the most relevant elements of the educational, economic, and cultural circumstances of the people concerned. The Committee considers it desirable that much of the study and research be conducted within the context of on-going community health programmes. For example, considerable value could be derived from even modest field studies planned to take advantage of the various practical opportunities that local health workers, teachers and other local leaders may have for making more effective use of the educational approach in their direct contacts with the people. In addition, considerable value could be derived from practical studies of the role, specific functions, educational and experience requirements essential for responsible technical health education personnel in various geographical, technological, economic, and administrative settings.

7. SUMMARY

This report is concerned primarily with two key elements of health education — planning and evaluation. Specifically, it suggests guidelines for planning and evaluating a health education service as an organized entity within the organizational framework of a governmental ministry or department of health. An underlying theme is the desirability of a better planned and more systematic approach to the educational and closely related social aspects of priority health programmes. This would ensure a more effective contribution to health education by all health workers, school teachers, and other personnel, as well as by appropriate governmental and non-governmental agencies and organizations. Detailed consideration is also given to the functions and personnel requirements of a health education service and to the need for a nucleus or cadre of specialists in health education and related social sciences.

The Committee believes that the guidelines given in this report will be helpful to countries that are at the planning or even the pre-planning stages of a health education service. Further, it considers that some of the guidelines may be pertinent for countries that are planning to modify or to enlarge their health education services, including their extension to intermediate or other administrative levels of the health organization.

The Committee particularly emphasized the importance of the people's participation in health improvement, which it is felt is of highest

priority in helping to strengthen the working partnership of the people with the health workers, teachers, and many others involved in programmes of health and related aspects of community development.

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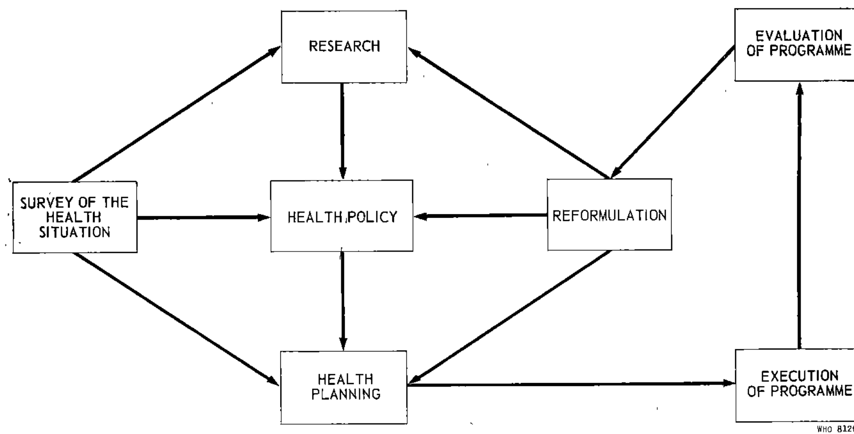
Annex

INTERRELATIONSHIPS BETWEEN HEALTH PLANNING, EVALUATION, AND PROBLEM SOLVING



As the above diagram shows, the initial survey of the health situation influences research, health policy and health planning. Once the health programme has been put into effect, evaluation may lead to a reformulation of health policy and planning and may also disclose the need for further research into more fundamental problems.