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The promotion and development of traditional medicine

Report of a WHO Meeting

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WHO MEETING ON THE PROMOTION AND DEVELOPMENT
OF TRADITIONAL MEDICINE

Geneva, 28 November–2 December 1977

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THE PROMOTION AND DEVELOPMENT OF TRADITIONAL MEDICINE

Report of a WHO Meeting

INTRODUCTION

A WHO Meeting on the Promotion and Development of Traditional Medicine was held in Geneva from 28 November to 2 December 1977. Dr Ch'en Wen-chieh, Assistant Director-General and Chairman of the Headquarters Working Group on Traditional Medicine, opened the meeting on behalf of the Director-General. He stated that the consultation had been convened in response to the considerable interest evinced in traditional medicine, which had also been expressed in resolution WHA30.49, adopted by the Thirtieth World Health Assembly in 1977, and in the subsequent requests by Member States for technical collaboration in organizing educational and research activities in this field.

The aim of the Meeting was therefore to assemble expert representatives of the major systems of traditional medicine to work together and suggest a plan of action to promote and develop the various aspects of traditional medicine.

The specific objectives were to make practical suggestions on policy guidelines for the provision of materials and techniques, collaboration among different systems of health care, health education of the public, manpower development, organization of health services, the future development of traditional medicine and its utilization, particularly in the national health services, and relevant research.

A major problem for special consideration was the effective collaboration of different practitioners and their integration into an overall national health care delivery system.

The Meeting then proceeded to discuss the theme: "Promotion and development of traditional medicine" under the following headings:

- Traditional medicine in health care
- Reasons for the promotion of traditional medicine
- Utilization of traditional medicine in national health care systems
- Integration of traditional medicine and modern medicine
- Manpower development for traditional medicine
- Research promotion and development in traditional medicine
- Recommendations

1. TRADITIONAL MEDICINE IN HEALTH CARE

The Meeting addressed itself to the following questions :

- What is traditional medicine ?
- What is a health care system ?
- How can traditional medicine be linked with health care systems ?
- What factors determine the identification of traditional medicine ?
- What kind of policies and practical actions could be adopted to promote traditional medicine ?

1.1 Concepts of traditional medicine and practitioners

1.1.1 *Traditional medicine*

Reference was made to the definition of traditional medicine already attempted by a group of experts from the African Region, convened by the WHO Regional Office for Africa, that met in Brazzaville in 1976. The definition arrived at by the group of experts was as follows :

“... the sum total of all the knowledge and practices, whether explicable or not, used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing.

“ Traditional medicine might also be considered as a solid amalgamation of dynamic medical know-how and ancestral experience.

“ Traditional African medicine might also be considered to be the sum total of practices, measures, ingredients and procedures of all kinds, whether material or not, which from time immemorial had enabled the African to guard against disease, to alleviate his sufferings and to cure himself.”¹

Traditional practitioners of Ayurveda define life “ as the union of body, senses, mind and soul,” and in this context consider “ positive health as the blending of physical, mental, social, moral and spiritual welfare.”² The moral and spiritual aspects are here stressed and thus give new dimensions to man and the system of medicine by which he maintains his health.

¹ AFRO Technical Report Series, No. 1, 1976 (*African traditional medicine. Report of the Regional Expert Committee*), pp. 3-4.

² From : Principles and practice of traditional systems of medicine in India (working paper presented by M. A. Razzack to the Meeting).

1.1.2 *The traditional healer*

The African Regional Office expert group also adopted a definition of the traditional healer, as follows :

“... a person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background as well as on the knowledge, attitudes and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability.”¹

1.2 Nature, goal and scope of traditional medicine

The Meeting held that all medicine is modern in so far as it is satisfactorily directed towards the common goal of providing health care, despite the setting in time, place and culture. In this light, it was observed that the essential differences among the various systems of medicine arise not from the difference in the goal or effects, but rather from the cultures of the peoples who practise the different systems. It was further stated that traditional medicine is nothing new, since it has always been an integral part of all human cultures. However, as traditional medicine in some developing countries has tended to stagnate through not exploiting the rapid discoveries of science and technology for its own development, it has kept a slow pace of change in comparison with medicine as practised in the industrialized countries, which keeps abreast of scientific and technological innovations to the extent that it is often exclusively referred to as modern medicine.

It was observed that many professional health personnel had often tended to regard traditional medicine as a practice on the decline and of no importance, and that this was a serious fallacy in so far as culture itself, of which traditional medicine was an integral part, was neither static nor dead.

Culture was defined generally as the sum total of the life-style, society patterns, beliefs, attitudes and the commonly accepted organized ways in which a community attempted to solve its life problems.

Cultural change and development take place with the acquisition of new knowledge or with a change in the surroundings of the people, who need to adapt in order to survive or to achieve a new life equilibrium. In this context of cultural evolution, traditional medicine has always developed and preserved its role of providing health care in all communities.

¹ See footnote 1 on the preceding page.

Because contemporary research has been heavily oriented towards medicinal plants, it was stressed that this tendency must not be allowed to continue to give the impression that traditional medicine was limited to the use of medicinal plants exclusively in the health-giving process. It was therefore necessary to keep in focus the wider scope of traditional medicine as experienced in actual practice in the health care systems of various countries. In this way a holistic approach to the study of traditional medicine would be assured and all aspects of research could be covered.

1.3 Some country experiences

In order to substantiate these concepts some country experiences were presented.

1.3.1 *Sri Lanka*

In Sri Lanka various systems of indigenous medicine are widely practised in rural areas. It was observed that the existence of the different systems is conditioned and supported by the vast variation in the ecology of the country and in cultural patterns. The accumulated wisdom of the people and their experiences constitute the substantive knowledge and skills used in traditional medicine. Over the centuries there has definitely been some change, albeit gradual.

As a result of the various systems of medicine being the major source of health care, there is quite a variety as well as a large number of traditional medicine practitioners at work in the country. Ten thousand practitioners are already registered and 6000 more are being considered for registration. The therapeutic scope of the practice is wide and includes preventive, curative, and specialized aspects. Most of the traditional systems follow the classical pattern of taking a history, determining the etiological factor complex, making a diagnosis, providing appropriate treatment, following up progress, and offering the appropriate rehabilitative measures.

Perhaps what appeared unique to the various systems of medicine was the nature of the prescriptions, which seem to be highly influenced by geographical factors, by local herbs and a hereditary formulary, and by the local cultural concepts and knowledge of the prevailing diseases and health problems.

The traditional system of medicine in Sri Lanka meets the basic health needs of about 70% of the population. Most of the traditional physicians run their dispensaries in their homes; a few are employed by the Govern-

ment or by local government authorities as specialists in hospitals. Some 80% of patients live within about 10 kilometres of their dispensaries.

1.3.2 Sudan

The Sudan presentation focused on the psychosocial aspects of traditional medicine. It was reported that traditional medicine is so successful in the Sudan that it is extensively used in the control of neuroses and alcoholism, and as such possesses a potential for research on the treatment and rehabilitation of neurotic reactions, alcoholism and drug dependence. Traditional medicine presents several valuable solutions to the management of culturally linked diseases and other health problems, and the reason for this spectacular success is that it is an integral part of the people's culture and they have deep confidence in it. The methods and techniques employed are at present closely guarded secrets.

1.3.3 Egypt

Some valuable discoveries relating to medicinal plant research were reported.

Ammi majus—a common plant in the fields and waste lands of Egypt—has been shown to contain ammoidin (xanthotoxin), ammidin (imperatorin), and majudin (bergaptene). The extracts of this plant have been shown to induce pigmentation in idiopathic leukoderma (vitiligo). *Ammi visnaga*—another perennial plant, used in traditional medicine by the ancient Egyptians in the form of a decoction and as a diuretic to treat renal colic—was recently analysed and found to contain the two principles khellin and visnagin. Khellin is useful in the treatment of angina pectoris and whooping cough and in the relief of ureteric and gallbladder spasms. It has been found to contain anthelmintic, antianaphylactic, anti-atherosclerotic, antidiabetic and antiulcerogenic properties.

The seeds of *Nigella sativa* Linn.—known in Arabic as *habbet el barakah*—are used in folk medicine by the Egyptian people as a diuretic and as a carminative, and the oil expressed from them is used in the treatment of asthma, respiratory distress, and coughs. The active principle, nigellone, has been isolated from the volatile oil fraction and is useful for the treatment of bronchial asthma.

Much research in traditional medicinal plants is widely undertaken in Egypt and the following plants are currently under investigation: *Urginea maritima*, *Phytolacca americana*, *Euphorbia* sp., *Glycyrrhiza glabra*, *Cynara scolymus*, and *Solanum laciniatum*. The last-named plant has already been shown to contain alkamines which are steroidal in nature and which can be converted into steroidal hormones. This plant is the

main source of solasodine, which is being isolated industrially for the preparation of pregnadienone acetate and used for further synthesis of various hormones.

This research activity in Egypt is undertaken by multidisciplinary teams, including pharmacologists, chemists, traditional healers, botanists, and clinicians, and is carried out in the following institutions : departments of pharmacognosy, chemistry, and pharmacology in the different universities ; national research centres (pharmaceutical sciences, natural products and pharmacology laboratories) ; desert institutes ; and the horticultural department of the Ministry of Agriculture.

The integration of traditional and modern medicine in the broad fields of research at the university and industrial levels was noted ; likewise the application of modern science and technology to traditional medicine.

1.3.4 Ghana

Reference was made to similar research work in Ghana but mainly in the field of clinical drug trials. According to Oku Ampofo, Director of the Centre for Scientific Research into Plant Medicine, Mampong-Akwapim, Ghana,

"... the leaves of *Elaeophorbium drupifera* and *Hillieria latifolia*, taken in combination with a palm oil soup preparation, act as a filaricide in guinea-worm infestation ... Four traditional treatments of herpes zoster are particularly interesting. The local application of the flowers of *Hoslundia opposita* and red cola nut, chewed together and sprayed on the lesion twice a day, often heals it within a fortnight. The local application of guava leaves, ground into paste with kaolin or white clay and *Piper guineense*, twice a day heals the infection in about ten days."¹

1.3.5 India

India provided another example of the role of traditional medicine in health care systems. As in Sri Lanka, the integration of traditional medicine into the public health service systems is advancing satisfactorily. Ayurveda, Siddha, Unani and Yoga are now widely adopted through government policy and included in the curricula of several institutions of learning, including universities, colleges of medicine, and secondary and primary schools, as well as in centres for the training of diverse types of health personnel. There are about 500 000 practitioners of traditional medicine in India, and their qualifications range from university doctorates, through certificates awarded in private schools, to skills and knowledge acquired after several years of apprenticeship to established practitioners. There are 108 colleges of indigenous medicine, and a statutory

¹ Plants that heal. *World Health*, November 1977, p. 28.

National Central Council directs their activities, controls standards of training, education and practice, and awards recognition status, which is necessary for employment in the public health services.

One major advance in the integration of traditional medicine was the passage of the Drug Act of 1940, which also covers traditional medicaments, demands licensure for practice, and assures the safety and control of drugs produced in India. Thus integration of the various systems of medicine—indigenous and otherwise—is already institutionalized at the national and state levels, in universities and other training centres, and in the utilization of all types of personnel in health care delivery systems in the rural areas, and in drug manufacturing establishments.

2. REASONS FOR THE PROMOTION OF TRADITIONAL MEDICINE

2.1 Intrinsic qualities

Since traditional medicine has been shown to have intrinsic utility, it should be promoted and its potential developed for the wider use and benefit of mankind. It needs to be evaluated, given due recognition and developed so as to improve its efficacy, safety, availability, and wider application at low cost. It is already the people's own health care system and is well accepted by them. It has certain advantages over imported systems of medicine in any setting because, as an integral part of the people's culture, it is particularly effective in solving certain cultural health problems. It can and does freely contribute to scientific and universal medicine. Its recognition, promotion, and development would secure due respect for a people's culture and heritage.

2.2 Approach—unique and holistic

Traditional medicine has a holistic approach—i.e., that of viewing man in his totality within a wide ecological spectrum, and of emphasizing the viewpoint that ill health or disease is brought about by an imbalance, or disequilibrium, of man in his total ecological system and not only by the causative agent and pathogenic evolution.

2.3 Operational factor

These are some of the main reasons why traditional medicine needs to be promoted and developed. Perhaps, from the operational point of view, the most cogent reason for the radical development and promotion

of traditional medicine is that it is one of the surest means to achieve total health care coverage of the world population, using acceptable, safe, and economically feasible methods, by the year 2000.

3. UTILIZATION OF TRADITIONAL MEDICINE IN NATIONAL HEALTH CARE SYSTEMS

3.1 Suggested procedure

(1) There is a need to evaluate therapeutic claims in order to select those types of treatment which could be adopted easily for wider public use.

(2) Where research in traditional medicaments is already progressing, drugs and medicinal plants which have already been studied could be prepared for public use immediately, and state resources used to promote their production and manufacture.

(3) More research should be undertaken to investigate all aspects of traditional medicine to improve methods, techniques, and the composition of traditional medicaments.

(4) At the psychological level there is need, first, to collect information on the positive aspects, in order to communicate such knowledge to the political decision-makers and professional personnel employing other systems of medicine, and eventually motivate them to accept and actively participate in the application of traditional medicine in public health care systems.

To shorten the duration of this public education process, the Meeting saw the need for an educational revolution in some countries, during which there would be curricular reforms and revision of training programmes for medical and other health personnel to respond to the needs of our time.

3.2 Guidelines for integrating traditional medicine into primary health care

(1) Giving recognition to traditional practitioners and incorporating them into community development programmes.

(2) Retraining traditional practitioners for appropriate use in primary health care.

(3) Acquainting professional health personnel and students of modern systems with the principles of traditional medicine in order to promote dialogue, communication, mutual understanding and eventual integration.

(4) Educating the community to believe that the provision of traditional remedies is not second-rate medicine.

(5) Cataloguing all medicinal plants in a country or region and disseminating the information thus compiled.

(6) Retaining the traditional forms and names of prescriptions whenever traditional medicines are adopted for use in primary health care, and carrying out relevant research into the traditional systems of medicine.

3.3 The role of WHO in cooperation with Member States for the promotion and development of traditional medicine

The three activities listed below were seen as constituting the principal role of WHO in the promotion and development of traditional medicine for integration into primary health care :

(1) Collaboration with Member States in formulating national policies on traditional medicine, as WHO has done in other fields, such as those of drug, cancer, and communicable disease control. Such policies would include the following elements :

- (a) integration of traditional medicine into primary health care ;
- (b) training of traditional healers at different levels—e.g., herbalists, bone-setters, and traditional birth attendants ;
- (c) organization of educational activities ;
- (d) application of appropriate technology for health improvement with special regard to simplicity, safety and efficiency ;
- (e) selection of essential traditional medicaments and techniques for use in primary health care ;
- (f) approval of special techniques for use in public health services—e.g., acupuncture and moxibustion ;
- (g) promotion and development of basic and applied research in traditional medicine ; and
- (h) promotion, adoption and application of certain well-known techniques for use in public health programmes—e.g., use of special medicinal plants to control vectors of disease such as *Oncomelania* in schistosomiasis.

(2) Information transfer among countries: this could be achieved by consultative meetings, seminars, newsletters and other literature, etc.

(3) Promotion of technical cooperation among developing countries (TCDC) and between developed and developing countries.

4. INTEGRATION OF TRADITIONAL AND MODERN MEDICINE

4.1 The concept of integration

Several countries now consider the concept of integration a reality that could be achieved in the foreseeable future.

Effective integration, like that of the Chinese experience, entails a synthesis of the merits of both the traditional and the so-called "western" or modern systems of medicine through the application of modern scientific knowledge and techniques. It requires a flexible system capable of accommodating individual skills and varying levels of knowledge and education, an insufficiency of resources, and a diversity of supportive technologies, particularly for primary health care.

In order to achieve this, it is necessary to ensure mutual respect, recognition and collaboration among the practitioners of the various systems concerned.

4.2 Country experiences

The present theme of integration of traditional and modern medicine is not very different from the preceding one of "traditional medicine in health care" because, while the one stresses the process of integration, the other describes the *modus operandi* during and after integration in modern health care systems. Whereas earlier it was necessary to accept that all systems of medicine have the same goal, it is now necessary to differentiate them as institutions so as to study the mechanisms of synthesis or integration.

The experiences of India and Sri Lanka were again used to demonstrate how integration of western and traditional indigenous systems of medicine could be effected. In both countries traditional systems of medicine have already been recognized, legalized, and well developed as separate systems in their own right. Earlier, the Government of India produced parallel streams of practitioners from their national institutions. Later, these practitioners were observed to "borrow" freely from one another

when the health situation indicated that such a practice would be advantageous.

The need for integration then arose, and a policy to integrate the knowledge of the various systems was developed. These systems have now been incorporated into syllabi and can be taught in schools, though to a limited extent. As integration or synthesis has been foreseen to possess several advantages over the present situation, it has been recommended for wider implementation. Planning for the achievement of this goal covers carefully structured training programmes, integrated multidisciplinary research, the teaching of fundamental principles, investigation of drug properties and the testing of hypotheses as a basis for further research.

The tremendous success of the Chinese experience in the integration of western medicine and Chinese traditional medicine continues to provide the shining example of the potential which lies in integration for the promotion and development of systems of traditional medicine.

4.3 Approaches to integration

It was considered that a cautious approach would have to be adopted to achieve success. The process could begin with basic research on educational systems, together with an investigation of ancient literature, fundamental principles, common drugs in use, principles of diet, problems of environmental hygiene, and other areas which are of interest to all the systems of medicine practised.

Adequate knowledge in these fields having been acquired, the mechanisms of integration could then be worked out for implementation. The initial attempt at integration, for most countries, should be by research and studies in traditional medicine, with a view to assessing its claims and validating them on scientific bases. Once this had been done, acceptability would increase and integration into existing health care systems would be possible and even easy to achieve.

It was observed that the greatest resistance to integration often came from administrative intransigence, and therefore the national political decision-makers would have to be convinced of the need for such action. The concept of integration is certainly not easy.

4.4 Fundamental problems of integration

Fundamental problems which make integration very difficult, or even impossible in certain settings, were identified as follows :

- (1) Emphasis on the cultural formulation of traditional medicine.

(2) Problems of cultural transplantation and the need for preservation of the cultural heritage in order to avoid cultural alienation.

(3) Marked inclination of the systems towards either curative or preventive measures, owing to economic advantages gained in certain settings.

(4) Impossibility of integrating certain aspects of traditional medicine based on spiritual, moral or other fundamental principles—e.g., exorcism and special healing arts associated with spiritualism.

(5) Commercial motives which control the modes of practice in certain settings.

(6) Fundamental differences between the concepts of life, health and disease—concepts upon which the underlying philosophies of the various medicinal systems are founded.

These situations, though apparently incompatible, may, however, complement or supplement each other in solving given health problems.

4.5 Advantages of integration

Integration was considered worth while because of the following advantages: (a) it offers reciprocal benefit to each system; (b) it improves the general health care knowledge for the greater welfare of mankind, especially in view of the inherent possibilities for wider and more efficient population coverage; (c) it enhances the quality of the practitioners as well as increasing their numbers; (d) it promotes the dissemination of knowledge relating to primary health care; and (e), above all, it offers the best means of achieving the goal of health care for the entire population by the year 2000.

4.6 Other obstacles to integration

Even where the policy was favourable, certain constraints were still noticeable:

- (1) Payment of lip-service to the integration process.
- (2) Fear of the possibly harmful iatrogenic effects of traditional medicine.
- (3) Doubtful status of the products of integrated training in current social and professional hierarchies.
- (4) Resistance by intransigent advocates of one or another system.

(5) Fear of litigation, since the legal apparatus tends to protect only the entrenched system, to encourage monopoly, and even to proscribe other systems.

4.7 Prerequisites for integration

Some guiding principles could be applied to most situations to facilitate the integration process. A major constraint is the current lack of information; the results of a preliminary survey and the assembly of factual data validated on modern scientific principles could be used to help to convince decision-makers, professional health personnel, and the population at large of the value of integration, usually through training programmes and strategies, such as the development of a common pharmacology to serve as a bridge between the various systems. It would also be necessary to obtain prior guarantee of sociopolitical acceptability and legal recognition in order to gain material and financial support and ensure eventual success. Another prerequisite would be the early establishment of a dialogue among practitioners of the different systems in order to eliminate prejudices and to help them to develop more acceptable attitudes. The demystification of several aspects of medicine would also facilitate communication between practitioners and the general population.

When all these desiderata have been fulfilled, and the merits of each system have been duly appreciated, public educational reforms could be introduced, and efforts made to integrate the products of the schools and training centres concerned into the public services.

4.8 Résumé on integration

In summing up the factors that influence integration, the Meeting considered these factors in the following major contexts :

- (1) Public pronouncement.
- (2) Political policy decisions.
- (3) Professional attitudes.
- (4) Public sentiment.

The various levels at which action could be taken to control these operative factors are identified below.

4.8.1 *International*

WHO could promote integration by :

- (1) Encouraging and collaborating with Member States to develop and formulate national policies directed towards integration.
- (2) Encouraging dialogue between the practitioners of the various systems.
- (3) Recommending the use of integrated teaching programmes in educational and training systems.
- (4) Promoting integrated research on traditional medicine.

4.8.2 *National*

At the national level the following steps could be taken :

- (1) Formulation of national policies.
- (2) Overt recognition of existing systems of traditional medicine.
- (3) Provision of legal recognition and social equality, employment opportunities and mobility.
- (4) Institutionalization of all systems and the securing of budgetary support.

4.8.3 *Professional*

In the professional sphere, action could take the form of :

- (1) Promotion of dialogue.
- (2) Replacement of existing council or board members with more receptive people who would appreciate the need for change to meet present-day exigencies.
- (3) Collaboration in integrated research for mutual benefit.

4.8.4 *Community (the consumer)*

The use of integrated health teams in basic health services and primary health care should be effected.

5. MANPOWER DEVELOPMENT

Manpower development for traditional medicine is vast and complex and requires consideration of the various systems of traditional medicine that are found in different cultural settings in developing countries.

In general it was considered desirable to mobilize the existing manpower categories for maximum utilization, since these workers have justified their existence by the fulfilment of health care needs in their respective communities. The problem then would be one of orientation to modern concepts of health care delivery systems, validation of their professional claims, further development of their skills and efficiency, and their integration into public health systems, especially in primary health care. In this respect retraining was considered essential.

However, it was observed that there was a positive indication for the training of new types of health personnel for the practice of traditional medicine and integrated medicine, so that the workers concerned might fulfil the new roles created in the expanded services in primary health care.

As sociopolitical acceptability was necessary for the successful utilization of new types of personnel and the survival of new health care programmes, it was agreed that all efforts should be made during the planning and execution phases of manpower development strategies to ensure that the various manpower categories—both old and new—were socially and politically accepted and publicly supported. The Meeting decided to focus on the development of the existing manpower categories, as follows :

- orientation of professional health personnel to relevant systems of traditional medicine,
- orientation of traditional birth attendants, who are a widely known category, to modern maternal and child care,
- training in Ayurveda, Siddha, Unani and Yoga,
- training in Chinese traditional medicine, including acupuncture,
- integrated training of the various types of practitioner,
- consideration of psychosocial and cultural factors in training traditional manpower categories,
- training of instructors and supervisors.

5.1 The Cameroonian model

In the study deriving from experience in the United Republic of Cameroon, details were given of the factors which could be considered as major determinants of manpower development for traditional medicine within the framework of primary health care.

The study took into consideration the sociopolitical climate of the country and indicated the phases of planned strategy to meet the manpower development goals.

Traditional medicine would naturally become the course content of the training programmes. Broad institutional objectives were developed as guiding examples and these were further graded and subdivided to demonstrate the teaching units that could be used to achieve the transfer of certain levels of knowledge, for which testimonial certificates and diplomas could be awarded.

Two main options could be adopted in this approach. Formal educational systems could be used, but this had the attendant problems of heavy costs, the recruitment of instructors, and the determination of standards.

The second option was the exploitation and development of the informal traditional educational structures for the training of traditional medicine personnel. This had the advantage of complete involvement of the community. As the people were already well acquainted with their own systems, there would be no further problems regarding sociopolitical acceptability, utilization of the products of such training, and the difficulties of cultural adaptation. The immediate advantage was that training within the traditional settings fulfilled the goals of primary health care as a part of total community development effort and fostered the spirit of self-reliance. The encouragement of traditional medicine practitioners to form clubs and societies for continuing self-education and training was suggested, together with the adoption of modern scientific teaching and learning methods and techniques.

5.2 Traditional birth attendants

The second model of developing traditional medicine manpower was the training of traditional birth attendants (TBAs). This is an important category, since TBAs deliver about two-thirds of the babies in the world and are creditable sources of communication regarding planned parenthood, maternal and child care and sexual behaviour. They are found in almost every village and in many urban neighbourhoods in Africa, Asia, and Latin America. They are about the only source of assistance for maternal and child care needs in many rural communities.

TBAs need to be developed so that the following requirements can be met :

- the reorganization of all existing health manpower for coordinated development,
- the provision of appropriate health care personnel for better coverage of deprived populations,

- the development of appropriate programmes and services within the context of primary health care.

The major aim of developing TBAs would be to incorporate them as a resource in the overall strategy of orientating all health programmes to the needs of the people. In some developing countries the use of non-conventional systems of health care will have to be seriously considered in order to reach the goal of total health care coverage by the year 2000.

The process of integrating TBAs into prevailing health care systems is illustrated in Fig. 1.

5.2.1 *Characteristics of TBAs*

TBAs are often regarded as a major manpower resource for the purposes of primary health care.

In communalistic societies, TBAs are the spontaneous answer to problems in the traditional setting, where people see health and allied problems very differently from the inhabitants of most western and industrialized countries. For instance, in communalistic societies, a wife is married to the family of her husband—and to the entire community; a child is born to the family and to the community, not merely to one mother or to one couple. When a pregnant woman is in labour, the anxiety of the entire community is raised. Everyone is concerned about the outcome and offers all possible support. The whole community rejoices if the delivery is successful, and mourns in the case of an unfortunate outcome. “She is *our* wife; she is *our* mother; this is *our* child.”

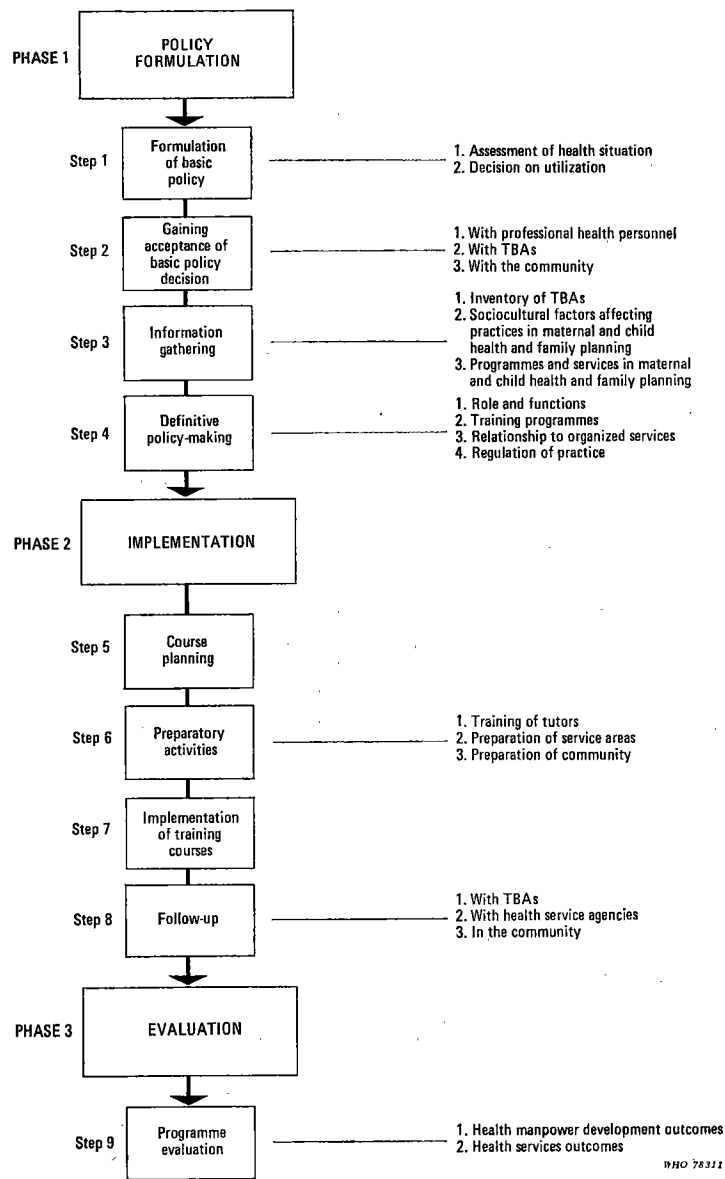
This is the sociopsychological climate in which TBAs function and which gives them relevance and status. Some TBAs have developed such very high levels of skills and have accumulated such a wealth of knowledge of traditional medicine that they now have much to contribute, even to modern obstetrical care.

5.2.2 *Problems of acceptance*

In countries where TBAs are recognized, considerable numbers have been trained and used in basic health services during the last 25 years. Such countries include Ghana, Indonesia, Malaysia, Pakistan, Philippines, Sudan and Thailand. The use of TBAs is considered part of the national health development plan. Where they are not yet recognized there is need for a change in health policy to retrain and integrate them. Such a situation calls for the reorientation of training programmes towards traditional medicine. The major problem is one of changing

Fig. 1

The process of integrating traditional birth attendants into prevailing health care systems



attitudes, and this applies both to the TBAs themselves and to the modern professional health workers, with whom they have to collaborate in a comprehensive health care system. Other problems include change of status and the demand for higher remuneration.

The following principles were suggested as guidelines :

- (1) Early involvement of TBAs in national health planning.
- (2) Allaying of existing suspicions.
- (3) Carrying out of research and studies to assemble information on the role, functions and conditions of TBAs.
- (4) Adaptation of training programmes to functional needs with due consideration of local conditions.
- (5) Judicious selection of tasks that could effectively be delegated to TBAs and instruction in how to perform them.
- (6) Avoidance of sophisticated and inappropriate training or any other approach which might alienate them from their cultural setting.
- (7) Initial consideration of suitable methods of teaching, in view of the fact that TBAs are usually illiterate adults aged between 40 and 60 years. Since TBAs are already health practitioners, some of them might need training which aimed at the elimination of a few harmful practices, but it would be judicious to conserve their ancient, harmless traditional approaches and practices, forasmuch as they possess very high cultural and psychological values which the "educated" expatriate may not readily appreciate.

5.2.3 *Some prerequisites for training*

- TBAs need a mixture of formal and informal training in their cultural context.
- Professional health workers with whom they have to collaborate also require orientation to ensure adequate support.
- Attention must be paid to the satisfactory training and preparation of supervisory staff to carry on educative supervision for continuous education.
- Teachers engaged in orienting TBAs must be experienced persons with a commanding personality and a practical knowledge of anthropology, adult teaching methodology and psychology.
- The aim should be complete integration of TBAs into community development action, and their training should be aligned with educational programmes for other health services such as maternal and child health, family planning and nutrition.

Although TBAs are often spoken of as a phenomenon of developing countries, it is the experience in certain developed communities that there is now an increasing demand for domiciliary midwives for reasons of culture and economic constraints. This is one of the main reasons for the enhancement of the role of TBAs in developing countries.

5.2.4 *Preservation of the cultural heritage*

This factor was constantly stressed as a means of ensuring the continuation of the traditional art, of avoiding unnecessary clashes and hostility, especially between the community and the health workers, and of giving time for the gradual and objective study of the inherent and potential qualities and properties of the skills and drugs used by TBAs. A good example was provided by Mexico, where TBAs have traditionally used spiders' webs for dressing the umbilical cord. This was viewed with disdain by "western" doctors as a dirty, harmful practice, but it was later discovered that the saliva of spiders (and the cobwebs themselves) contained antibiotic properties, which had been recognized for years by TBAs.

5.2.5 *Psychosocial aspects of training TBAs and other traditional medical practitioners*

Much discussion centred on the psychosocial aspects of training, and the content of the practices of traditional medicine were classified as follows :

- (1) Aspects of intrinsic and proved worth that could be encouraged and adopted to enrich universal medicine.
- (2) Doubtful and unknown aspects of practices yet to be proved of value.
- (3) Practices that are known to be dangerous and harmful and should therefore be discontinued.

In such classifications, caution is needed, particularly when procedures and techniques in the third category are considered. Each practice must be carefully studied and understood in its cultural context. The results of experiments initiated by UNESCO and UNICEF on cultural change through the years are highly relevant to the promotion and development of traditional medicine. This whole programme was primarily concerned with the problem of cultural change, and the methods of

approach to the training and integration of various personnel categories should be carefully studied before being applied.

5.3 Recommendations on useful approaches

(1) It was suggested that community health projects and behavioural sciences, already included in medical and allied curricula (in some cases as core subjects), should be the channels through which traditional medicine could be introduced into educational programmes.

(2) Research in traditional medicine should be encouraged so that knowledge of the various aspects could be rapidly acquired.

(3) Studies of a general nature relating to traditional medicine could also be introduced as courses in secondary schools and colleges, in order to teach the subject in a wider cultural context.

5.4 Evaluation

Reference was often made to evaluation as a means of validating programmes, and the use of broad indices of health in evaluating the impact of the services offered by the various practitioners, including TBAs, was recommended as a means of determining the effectiveness of the different systems. For instance, one could use maternal mortality, infant mortality, and morbidity rates for specific diseases such as neonatal tetanus to compare the effectiveness of TBAs with that of official basic health services staffed by professional midwives. If the latter services produced lower mortality and morbidity indices, that would be an indication for training the TBAs to improve their own health care system and reduce the mortality and morbidity rates among their patients. In one situation, an indication of the valuable work done by the TBAs is the higher proportion of women who prefer home delivery supervised by TBAs, even after attending prenatal clinics staffed by professional health personnel.

When it comes to proving with mortality indices the effectiveness of a service, even TBAs would forego certain traditional practices in order to improve the quality of their own services.

5.5 Guiding principles for policy on the training of traditional medicine manpower

There is a need for scientific planning, utilization of modern techniques and methods of management for execution, and a clear definition

of objectives for the development of the manpower to meet the needs of the community.

Since manpower categories in traditional medicine must vary according to the nature of the different cultural contexts, it was recommended that each nation should study its own peculiar situation and develop approaches, techniques and methods that would best satisfy its particular needs and solve its local health problems. China and India have developed traditional medicine and trained their various categories of health personnel with considerable success.

5.6 Institutional training

Efforts in the development of various types of health service have created the need for new types of school. In Egypt, for example, three institutions were identified : (a) the Institute of Natural Therapy ; (b) the Institute of Cultural Heritage ; and (c) the Institute of African Studies.

In the USA, Chinese acupuncture has been integrated into the medical system in some states, and courses are now being offered in the State of New York to doctors of medicine.

Manpower development for traditional medicine could therefore take various forms and produce personnel, ranging from graduate practitioners of traditional medicine to those with only limited skills.

5.7 Suggestions for the removal of obstacles

- Popular education by means of journals, such as the November 1977 issue of *World Health* specially devoted to traditional medicine, should be undertaken at regional and national levels, to share and exchange knowledge in this field of manpower development.
- Cooperation between countries could assist in solving common problems.
- Seminars, conferences, workshops, and the use of mass media could also be used to educate both health workers and the general public on the relevant problems.

The Meeting felt that, despite existing obstacles, the time was opportune for mobilizing all the forces of traditional medicine for primary health care for the benefit of the people. If China could succeed within

one generation, then the whole world could likewise achieve some success in providing the entire population with adequate health care services.

6. RESEARCH PROMOTION AND DEVELOPMENT

Research priorities for the promotion and development of traditional medicine would differ for each country and cultural setting. (For a résumé of research areas, see Fig. 2, page 33.) The Meeting therefore decided to study the various approaches by using the case studies described below.

6.1 Mexican experience

In Mexico, priority is given to operational work which is oriented towards the validation or invalidation of popular knowledge with the aid of scientific research. This approach permits close collaboration with the traditional healers and their systems of practice, with special attention to medicinal plants already in use in traditional medicine. It permits feedback to the traditional healers themselves and to the community in general. For instance, it reveals any harmful side-effects of medicinal plants so that these can be either eliminated from practice or corrected as the research findings suggest. Experimental pharmacological research is designed to test water extracts, infusions from plants, etc., as used in traditional medicine, to establish the effectiveness and toxicity, if any, of popular remedies. The compilation of a basic herbal of scientifically tested medicinal plants, with concurrent medical education of the practitioners of traditional medicine, is proposed. The plant material under study depends on priorities related to national health problems and to the most common popular remedies in use.

The Mexican group began operations with the collection and study of national literature on medicinal plants that has accumulated during the last three centuries ("dead information") and then proceeded to study the plants in present-day use ("living information"), the results of which formed the basis of a computerized data bank of Mexican medicinal flora.

Local journals immediately publish the results of experimental and field research findings at several information levels.

The work teams are multidisciplinary, consisting of physicians, sociologists, anthropologists, botanists, chemists, pharmacologists, traditional healers, and other supporting staff. This approach has proved very effective.

6.2 Nigerian experience

Experience from Nigeria suggested the following principles for research in traditional medicine :

- The sociocultural basis of traditional medicine in research should be recognized.
- It was important to achieve collaboration between traditional medicine and modern medicine for expansion, efficiency and integration.
- The occult aspects of traditional medicine were not to be ignored ; they were, however, difficult to develop now, especially as such attributes could not be freely transferred.
- More research centres needed to be created, and a multidisciplinary approach was preferred.
- Research in traditional medicine should have as its goal the transfer of results to the traditional healers and the health profession in order to improve the efficiency of services and to eliminate harmful practices.
- Maintenance of traditional medicinal drugs in their original forms of preparation, after scientific validation, was very much to be encouraged.
- Three task forces were recommended at the national level for the collection of information, research and the application of information and research findings for the development of traditional medicine.

6.3 Chinese experience

The Chinese model of applying modern scientific research to the nation's traditional medicine, which includes acupuncture and herbology, was highlighted. For example, acupuncture has been used for many centuries, but it has been through scientific research, including the basic modern sciences of anatomy, physiology, biochemistry and electronics, that the mechanisms of function are now better understood and the equipment and techniques have been perfected for the treatment of a wide range of diseases.

One advantage of acupuncture is that it uses simple equipment for service and research and is therefore readily applicable in primary health care. Acupuncture anaesthesia is useful in surgery, including brain and heart surgery, and has also proved effective in paediatric surgery.

The lesson learnt from the Chinese experience is that research on traditional medicine should be geared to the feasibility of promoting and developing that traditional system in a given area, mobilizing scientists locally and, where necessary, with international collaboration.

6.4 Guidelines for research

Research in traditional medicine in any country should begin with a review of literature on the subject. Contributory fields for exploration are sociology, anthropology, botany, and therapeutics.

6.4.1 *Manpower for research*

(1) *Local workers*, including both professional health personnel and traditional healers, scientists, and nonmedical personnel, should form the nucleus for research in traditional medicine.

(2) *Training programmes* should be developed locally and, where necessary, in collaboration with international centres. These training programmes will need experts in a variety of disciplines, emanating from diverse institutions and countries.

(3) *A team of experts* consisting of scientists and health workers should be organized to initiate and lend support to projects in various countries, in collaboration with local workers. This team would also serve as a vehicle for the transfer and exchange of scientific techniques.

6.4.2 *Research centres*

With the help of local governments, collaborating centres should be designated and coordinated by international bodies such as WHO to delimit geographical regions and establish scientific priorities in traditional medicine.

6.4.3 *Research programmes (e.g., medicinal plant research)*

These programmes should contain the following phases or research components :

(1) *Literature review and nomenclature.*

(2) *Priorities in drug plant research.* The priorities should be locally determined in accordance with local disease patterns and public health problems.

(3) *Surveys and cultivation of medicinal plants.* Such research is necessary for the continuation of practice and the drug industry. It may involve other investigations such as soil analyses and study of climatic conditions, ecology and related factors.

(4) *Processing of medicinal plants.* Procedures of sorting, washing, slicing, drying and storage of medicinal plants are important for current practice, industrial development, and conservation of natural sources. In traditional medicine, medicinal plants are customarily water-extracted. Modern pharmaceutical procedures often use sophisticated equipment, chemicals and temperature control for extraction. For analytical research, the application of science and technology is imperative.

(5) *Clinical research.* This is necessary for drug trials and validation ; it is better organized in association with hospital or treatment centres. Drug trials on animals should be an extension of these studies. It needs to be emphasized that the biological properties of certain medicinal plants should first be tested with the preparations used by traditional healers. The effectiveness of some drugs could be lost when chemical principles are extracted from the crude drugs and then tested. This procedure is mandatory for the screening and verification of drugs derived from traditional medicinal plants.

(6) *Basic scientific research.* Since the development and promotion of traditional medicine is ultimately aimed at the benefit of humanity as a whole, all relevant professional and scientific points of view should be included in the discussion. However, since most developing countries, where primary health care needs to be promoted, are pressing to achieve target dates, basic scientific research goaded by academic curiosity must be given low priority, partly on account of these countries' meagre resources.

(7) *Information centres.* Appropriate mechanisms must be developed for the collection and dissemination of research information to potential users.

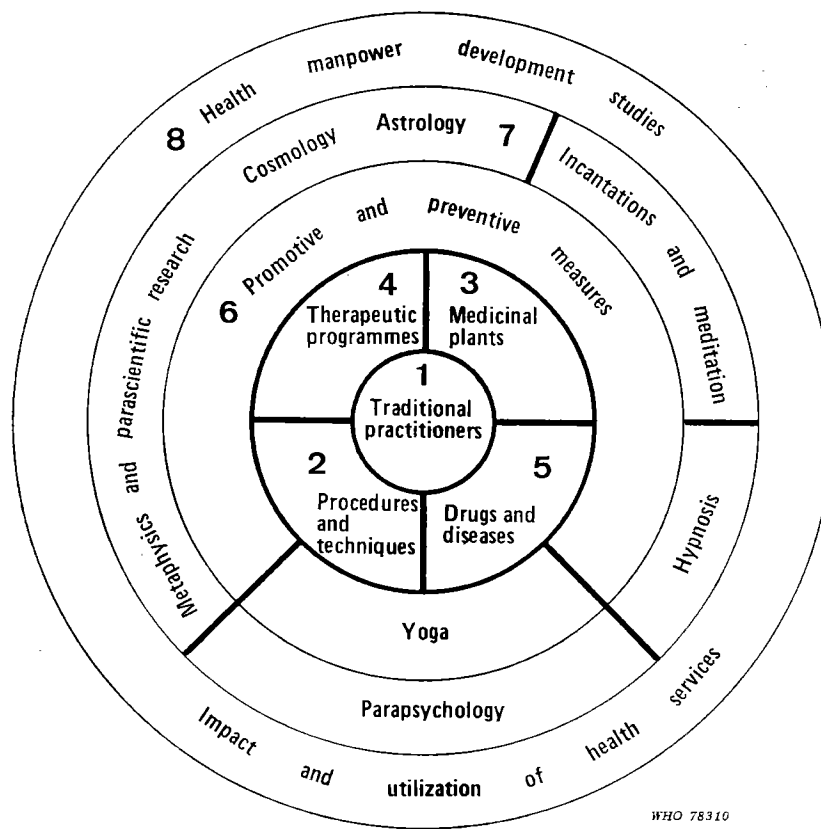
6.5 Some examples of current research projects

6.5.1 Evaluation of traditional medicines

WHO has initiated a research project in which a review of literature assembles information on the evaluation of traditional medicines for

Fig. 2

Résumé of research areas in traditional medicine



WHO 78310

1. Research on traditional practitioners of all types
2. Research on traditional systems, procedures, techniques, technology and fundamental principles
3. Medicinal plant research
4. Evaluation of therapeutic programmes
5. Research on drugs and diseases
6. Research on promotive, educational and preventive measures
7. Metaphysics and parascientific domains, cosmology and astrology, parapsychology, hypnosis, religious incantations and meditation
8. Manpower development research; Impact and utilization of health services

their efficacy and safety as determined by evaluation on a scientific basis.¹

¹ Selected Bibliography on Evaluation of Traditional Medicines for Safety and Efficacy (unpublished document OMH/76.3).

6.5.2 *The WHO Special Programme of Research, Development and Research Training in Human Reproduction*

This WHO programme is involved in the study of indigenous medicinal plants that are used for fertility regulation. A task force has been created and is carrying out research in six centres located respectively in Brazil, Hong Kong, Republic of Korea, Sri Lanka, United Kingdom and USA.

The following activities have been carried out in connexion with the preparation of guidelines for the isolation of active compounds from selected plants :

- designing of sample questionnaires for investigating the field use of indigenous plants for fertility regulation,
- preparation of suitable dosage forms of plant extracts for pharmacological evaluation in animals,
- LD₅₀¹ determination of plant extracts,
- evaluation of plant extracts for antifertility effects.

This Special Programme anticipates cooperation with the WHO Working Group on Traditional Medicine in the use of indigenous plants for fertility regulation.

6.5.3 *WHO Special Programme for Research and Training in Tropical Diseases*

Another WHO Special Programme—for research on six selected endemic tropical diseases (malaria, schistosomiasis, filariasis, leprosy, trypanosomiasis, and leishmaniasis)—is investigating the possibility of finding “ new tools ” for their treatment and control. The diseases in question constitute a serious menace in tropical countries, and it is hoped that traditional and folklore medicine might offer some leads to their control, as well as provide remedies which are cheap and easily available to the people. Collaboration is therefore being sought with the Working Group on Traditional Medicine for research on these specific problems.

6.5.4 *Drug dependence*

WHO is also concerned with drug dependence, a serious problem in both the developed and the developing countries. Mention was made of

¹ The lethal dose for 50% of the experimental animals.

the use of traditional medicine methods to control alcoholism, and the view was expressed that such methods might provide a solution to this problem. It was stated that acupuncture could influence drug dependence states. It was therefore suggested that the Working Group on Traditional Medicine should also focus its attention on the problem of drug dependence.

6.5.5 *Research on cancer chemotherapy*

It was observed that although cancer did not constitute a priority health problem in the tropical countries of Africa and elsewhere for the moment, it will assume an important place when the common communicable diseases, which at present have high priority, are well under control or even eradicated. The generally short life expectancy contributes to the current relatively low cancer incidence, but with improvements in health conditions greater proportions of the population will reach the age when cancer becomes an increasing risk. There are already some cancers exceptionally common in Africans—e.g., primary liver cancer and Burkitt's lymphoma. The interest of the Working Group on Traditional Medicine is being invited on the subject of cancer research. It is possible that there are some traditional remedies which can be developed for the cure of cancer. Collaboration is also being sought for increased research in cancer chemotherapy.

6.5.6 *Research on rheumatoid arthritis*

The successes already achieved by the research groups involved in evaluating the efficacy of traditional medicinal remedies in rheumatoid arthritis in India again confirmed the great potential of traditional medicine in the future of world medicine.

6.5.7 *Research and other diseases*

Successes have been achieved with other health problems, such as cardiovascular diseases, diabetes mellitus, various infectious diseases, burns, acute abdominal ailments, bone fractures, kidney stones and gallstones.

Similar successes can be expected with other diseases. Work is already in progress with a view to selecting essential traditional medicinal plants and medicaments that could be promoted for wider use in basic health services in countries.

7. RECOMMENDATIONS

In making its recommendations, the Meeting took into consideration the fact that traditional systems of medicine remain the major source of health care for more than two-thirds of the world's population, and that impressive progress has been made in certain developing countries, such as China and India, through the integration of traditional with western systems, and the application of modern science and technology to the promotion and development of traditional medicine. Resolution WHA30.49, urging interested governments to give adequate importance to the utilization of their traditional systems of medicine, was also given due consideration, as were the contents of the Organization's magazine *World Health*, whose November 1977 issue, as stated earlier, was devoted to the subject of traditional medicine.

The following recommendations were made :

7.1 General

The World Health Organization should use all the possible resources at its command to continue to promote and develop traditional medicine. This can be done :

(1) By promoting the formulation and declaration of specific national policies for the encouragement, support and development of traditional systems of medicine indigenous to the Member States, and by undertaking administrative, organizational and budgetary commitments to meet this objective. The elements for such a policy should include the legal recognition of traditional medicine, and the integration of traditional medicine into national comprehensive health care systems, including primary health care.

(2) By establishing a committee of experts which would advise on the programmes of promotion and development of traditional medicine, monitor and coordinate research efforts, evaluate programmes for replanning and the proper reorientation of strategies. This committee should be composed of persons specialized in the different areas of traditional medicine from the various WHO regions.

7.2 National and international policy support for the promotion of traditional medicine

(1) Efforts to promote international cooperation between developed and developing countries, and particularly technical cooperation among

developing countries (TCDC), in the field of traditional medicine are essential.

(2) National governments should favour the policy of integrating traditional medicine into their general comprehensive health care system in order to facilitate the realization of health care goals.

(3) The organizers of the forthcoming International Conference on Primary Health Care, at Alma-Ata, USSR, should consider the importance and necessity of fully utilizing and developing the vast manpower currently existing, in the form of traditional medicine practitioners, in order to make effective health care available to underserved populations.

(4) WHO should explore the possibility of convening an international conference on traditional medicine specifically to discuss the utilization of traditional medicine in primary health care systems as a means of helping to fulfil the objective of health care for all people by the year 2000.

7.3 Collection and dissemination of information pertaining to traditional medicine

Lack of information was considered the greatest initial barrier to assessing the feasibility of national health plans. Organized efforts should therefore be made without further delay to ensure the collection of information and dissemination through :

- (1) Promotion of collection of basic information by surveys on :
 - traditional medicine personnel categories in practice (census),
 - traditional medicine centres or functioning services,
 - utilization of practitioners of traditional medicine in health services,
 - diseases known to have been successfully treated by traditional healers,
 - traditional medicine drugs, preparations or medicaments, traditional medicine pharmacopoeias,
 - determinants of manpower needs for primary health care services,
 - collaborating factors and supportive infrastructure for the promotion of traditional medicine,
 - literary resources to gather information and compile bibliographies on traditional medicine.
- (2) Special meetings, such as conferences, seminars and workshops.
- (3) Publications, such as journals and bibliographies.

7.4 Educational programmes

Following the collection and analysis of the relevant information, educational programmes could be planned and executed with the following aims :

(1) To educate the community on new health policy and to enlist its support and cooperation.

(2) To change the unfavourable attitudes of members of the health and allied professions.

(3) To disseminate information on traditional medicine for use and application.

(4) To assure the people that the new policies and approaches are in support of the practice of traditional medicine, and that they are aimed at enhancing it for safety, efficacy and wider use at low cost.

(5) To assure traditional medicine practitioners that they will be the promoters and dispensers of the new health care system in their own cultural setting.

(6) To stress that where traditional medicine drugs have been studied and adverse side-effects (iatrogenic effects) eliminated, the drugs should be produced in the same or similar form for general use.

7.5 Application of traditional medicine to primary health care

The promotion of traditional medicine in health care services and especially in primary health care should be intensified by :

(1) Application of appropriate technology to health care improvement based on simplicity, safety, efficacy and availability at low cost.

(2) Selection of lists of essential plants, drugs, or techniques employed in traditional medicine, for use in public health services and particularly in primary health care.

(3) Approval of proved useful methods and techniques, such as acupuncture and Yoga, for use in public health services.

(4) Integration of traditional medicine and western medicine in training programmes at various levels.

(5) Introduction of traditional medicine into public hospitals, dispensaries and health centres. The functions of traditional medicine practitioners should be carefully coordinated to ensure efficiency.

(6) Incorporation of self-evaluating mechanisms for continuous evaluation, and feedback in order to improve the techniques or to reorient the programmes whenever necessary.

7.6 Manpower development

Coordinated steps should be taken by Member States in collaboration with WHO to promote manpower development in traditional medicine by :

(1) Training the various categories of traditional medicine workers (including those with limited skills), such as traditional birth attendants and bone-setters.

(2) Encouraging traditional medicine practitioners to form clubs or societies as a means of checking harmful practices, eliminating quacks and charlatans, assuring continuous informal education, cultural loyalty, and the conservation of a high level of professional ethics and practice.

(3) Organizing educational activities in traditional medicine either by establishing new training centres or by revising existing curricula to include subjects related to traditional medicine.

Lastly, technical education boards, chairs for traditional medicine in medical schools, and new institutes could be created, and a directorate of traditional medicine could also be set up in health ministries.

7.7 Multidisciplinary research programme

A planned multidisciplinary research programme should be formulated and implemented in collaboration with Member countries, as follows :

(1) Operational research on traditional medicine in health care systems.

(2) Various aspects of medicinal plant research, such as plant identification, classification, phytochemistry, pharmacology, and laboratory and clinical trials for therapy.

(3) Studies in psychosocial and cultural aspects and behavioural patterns.

(4) Manpower development and health team training, including development of effective training methods.

(5) Role of traditional medicine in other fields of medical research, such as fertility regulation, treatment of infertility, control of tropical endemic diseases, cancer therapy, the care of drug-dependent persons, and the ageing process.

(6) Validation of popular traditional medicine therapies.

(7) Promotion of research activities on the integration of various systems of medicine.

(8) Establishment of national institutes for research into traditional medicine.

Annex

Films on Acupuncture Anaesthesia and Chinese Herbology

Two films were shown on developments in traditional medicine in China during the last decade. The following points that emerged were of significance to the Meeting's discussions :

- the importance of applying modern science and technology in research on traditional medicine,
- the extent to which integration of traditional and western medicine could contribute to and even revolutionize health care,
- the tremendous potential for healing possessed by the properties of the plants,
- the importance of teamwork and good team spirit in the organization of basic health services,
- the need to give the health of the rural masses the important place it deserves,
- the need for a spirit of self-reliance in planning total community action programmes for development.

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