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OBJECTIVES

Swasth Hind (Healthy India) is a monthly journal Published by the Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi. Some of its important objectives and aims are to :

REPORT and interpret the policies, plans, programmes and achievements of the Union Ministry of Health and Family Welfare.

ACT as a medium of exchange of information on health activities of the Central and State Health Organizations.

FOCUS attention on the major public health problems in India and to report on the latest trends in public health.

KEEP in touch with health and welfare workers and agencies in India and abroad.

REPORT on important seminars, conferences, discussions, etc., on health topics.

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IN THIS ISSUE

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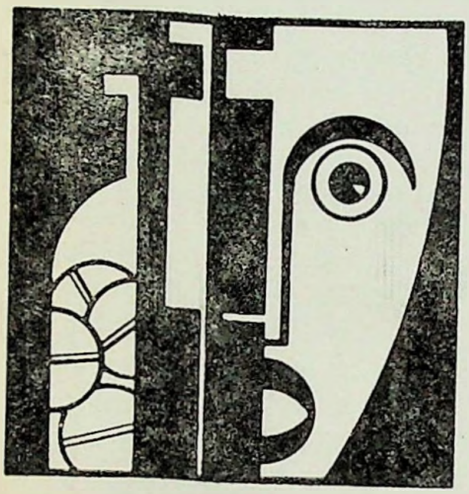
DRUG ADDICTION
—a social evil



MOHAMMAD NAJMI

Drug addiction has been a source of many personal and social evils. Apart from the harm they do to the physical, mental and moral life of the individual, the use of drugs does result in the creation of serious problems of crime, social insecurity and juvenile delinquency in the society.

THE problem of drug addiction is becoming more and more acute in the highly industrialized Western countries.

In the comparatively less developed countries, where the society is still predominantly agrarian, the problem of drug addiction has not yet reached the same dimensions. However, with the speedy economic development and increasing urbanization in certain regions, the social structure and norms are undergoing change and the problem of drug addiction is soaring up.

In India the problem of drug addiction presents many features which differ from those of the Western countries. In our country drugs are used mostly in a crude form and taken orally. While no exact figures are available about the extent of drug addiction in the country, apart from the registered opium addicts, the recent reports in the press and otherwise indicate that opium and *hashish* which were previously restricted to the uneducated and backward communities in India have also caught the fancy of the youth particularly those living in the bigger cities and the towns.

Addiction among students

A recent study of the Indian Council of Medical Research (ICMR) in different major cities of India has reported that 46 per cent of the men students and 18 per cent of the women students of Delhi University are drug users.[1] The Bombay study showed that 20 per cent were addicts. In Calcutta 11.4 per cent were found to be addicted to amphetamines, while Chandigarh revealed 19 per cent of the students addicted to drugs. Seventy per cent of the student addicts belonged to the upper socio-economic strata having a pocket allowance of Rs. 150 to Rs. 200 per month.

Western sub-culture

Even the younger age groups may not be free from this evil. According to the findings of the Central Bureau of Narcotics, not less than 5000 Delhi students (aping Western sub-culture) are using drugs.[2]

1. Quoted by Radha Paul, "Drug and Crime Social Aspect" Ind. Jour. of Crim., Vol. 6, No. 1 Jan. 1978, P. 38.
2. *Bhattacharya B. K.*, Violence, Delinquency Rehabilitation 1978 P. 32.

A study of drug users was made in Agra on 1192 post-graduate students from faculties of Arts, Science, Commerce and final year undergraduates from Medicine. The over all prevalence rate of drug use was 50.08 per cent. The highest number of drug users was 76.43 per cent among male medical students.[3]

In Chandigarh a study of the use of drugs was made on 408 students. Seventy seven (18.87%) of them were drug users. In another study of 570 students from Chandigarh and Raipur it was found that between 10 to 24 years the students most commonly use alcohol, tobacco, amphetamines, cannabis, sedatives and tranquilizers.[4]

In a study made in Lucknow district of U.P. in 1979 among the rural population out of 2010 individuals (21.4 per cent) were found drug users.[5]

Marijuana is ordinarily used by smokers in the United States. The effect it produces are experienced as exhilaration, loss of inhibitions, a changed sense of time, and other psychological effects which have sometimes been described and extravagantly praised by those who have experienced them. These effects are in a general way comparable to the stimulating effects produced by alcohol in the sense that they are intoxicating, although they differ qualitatively from those of alcohol.[6]

In spite of the proved fact that smoking causes cancer, and is also a traditional taboo in India, more and more people are taking to smoking.

Addiction to psychotropic drugs among student community

Smt. Sheela Kaul, Minister of State in the Ministries of Education and Social Welfare, informed the Lok Sabha on 28 April, 1983, that as per the findings of the research studies sponsored by this Ministry through expert Institutions, following four causes were found important for the use of drugs:

1) Psychological causes like relieving tention, easing depression, satisfying curiosity, "getting kicks", "feeling high", intensifying perception, removing boredom, etc;

2) Physical causes like staying awake, etc;

3) Social causes, *i. e.*, as an aid to socializing, challenging social values, etc; and

4) Miscellaneous causes like improving study, sharpening religious insight, deepening self understanding, solving personal problems, etc.

To create awareness about the ill-effects of drug use, States/Union Territories have been asked to undertake educative publicity. The Ministry of Education have also written to the Vice-Chancellors of the Central Universities to do likewise.

Unlike the use of alcohol or cocaine for the purpose of stimulation, morphine is used for the quietening effect it can produce. Continuous use of morphine results in mental weakness, loss of energy, loss of concentration, loss of self-control, and may even result in paralysis of the will.

Cocaine like alcohol, is a stimulant in the first instance, but ultimately makes the victim a wreck. Cocaine addicts are often found bold enough but after a time, when the cocaine is not available or is stopped forcibly they show weakness of the mental condition. Criminals using cocaine are often very desperate types of criminals—ready to take life of the victim, even on the slightest provocation or resistance.

Other drugs include opium, *charas, bhang*, etc. Among these *charas* and cocaine are obtained generally from hemp plant.

Criminal behaviour

Narcotic drugs are often said to be factors in the genesis of crimina

3. Dr. S. P. Gupta, "The Young Escapists who take to drug" Social Welfare, Vol. XXIX, No. 4 July 1982, PP. 18—19.
4. Ibid
5. Ibid
6. Lindesmith, Alfred R., "Marijuana Problem" in *The Sociology of Crime & Delinquency* (John Willey & Sons, Publisher U.S.A., 1970), P. 654.

behaviour. Addicts of narcotic drugs mostly resort to theft to obtain money for procuring the drugs. Many people become delinquents after they have started consuming narcotics. Many violent offenders take narcotic drugs to get the courage or stamina to go through with acts like, murder, burglary, extortion, rape and so on, which they might not commit when not drugged.

Role of social scientists

Recently not only social scientists and mental health workers but people in all walks of life have shown their concern to the problem of drug abuse especially among college students. Systematic investigations have been undertaken in many parts of the world in order to find out the prevalence and pattern of drug abuse. △

GOVERNMENTAL EFFORTS

The Drug Addiction Committee appointed by the Government of India in 1976 submitted its report to the Government at the end of 1977. It was found by the Committee that the drugs most frequently abused were alcohol, tobacco, opium, cannabis and psychotropic substances such as meprobamate, diazepam, methaqualone, phenobarbital and dextro amphetamine. It made the following recommendations:

(*i*) *National Board of Drug Control should be established and a single law should be enacted to deal with the problem in respect of all dependence producing substances (except alcohol which was the subject of a special proposal); more stringent penalties for violation of legal provisions particularly for export and import of drugs.*

(*ii*) *Drug education programmes should be a part of health education at large.*

(*iii*) *Better upbringing of children and youth, strengthening of the family and the peer groups, involving youth in challenging programmes and social transformation will reduce the need for using drugs.*

(*iv*) *Detoxication centres should be established in the institutions where adequate facilities are available.* △

A WORLD-WIDE PROBLEM

The United Nations Commission on Narcotic Drugs at its 28th Session in Geneva, deliberated on the growing problem of drug addiction in every part of the world, especially among the younger generation and reported that modern patent medicines are causing a good deal of harm to the takers of these drugs. There is a continuing spread of heroin abuse and increased abuse of other opiates, such as morphine and synthetic narcotics. Cocaine is getting more popular in the United States and Western Europe. Cannabis (bhang) is very much in use in the Soviet Republic. In France, in 1976 there were 15,000 regular addicts of cannabis, in Holland 24,000, and in Australia 180,000, young men in the age group of 15-30. The smoking of coco paste in South Africa has set a new pattern. All over the world, non-barbiturate sedatives, hypnotics and to a lesser extent tranquilizers are becoming very popular.

DRUG DEPENDENCE

AWNI ARIF

THE global nature of drug dependence problems, the negative impact of drug abuse on social, health and economic development (particularly in developing countries), and the rapid changes in the types of drugs used and the patterns of drug use all contribute to the need for great flexibility in planning and developing country programmes. Three essential considerations in this connection are the transfer of experience, integration with existing activities, and the training of suitable personnel.

In view of the considerable gap in resources, knowledge and experience in matters connected with drug dependence between developed and developing countries, a well-organized international system for the transfer of experience and exchange of information can obviously be of benefit. One basic principle in developing a programme must therefore be to select from the experiences of other countries, and to adapt them to the needs, resources and social, health and cultural systems of the recipient country.

The drug dependence programme must, wherever possible, be integrated with existing health, welfare and economic development services. The magnitude and nature of the health and social damage from drug abuse has to be assessed in the context of each country's overall health, social and economic problems.

As for suitable personnel, while there is a need for some specialists in clinical research, epidemiology and programme planning, it is unrealistic to employ a wide range of specialists for most programmes in developing countries. In many cases medical assistants, primary health care workers, community nurses, and other health auxiliaries could be trained to carry out tasks in the field of drug dependence under the supervision of physicians and others with advanced training. People outside the health field, such as welfare workers, teachers, the police and recovered patients, can also make contributions to both prevention and treatment programmes.

The drug dependence programme must, wherever possible, be integrated with existing health, welfare and economic development services. The magnitude and nature of the health and social damage from drug abuse has to be assessed in the context of each country's overall health, social and economic problems.

Drug dependence programmes have a number of points of contact with other WHO programmes for underserved populations. The following are three areas in which collaboration can be particularly effective.

Primary health care

Many of the rural areas where opium is produced have little or no health service. Frequently opium is the only medicine available and is widely used for the relief of pain and disease symptoms.

In such areas, eliminating opium production without providing treatment for common illnesses is unacceptable. The whole purpose of WHO's primary health care programme is precisely to develop basic health services in areas where none now exist. Primary health care is based on a combination of scientific health technology and acceptable traditional healing practices, and it should be possible to introduce modern chemotherapy and other techniques to replace the current reliance on opium. Moreover, the primary health care workers could be trained in the field of prevention and to provide treatment and after-care for opium-dependent persons.

Country health programming

One of WHO's priorities is to assist countries in developing primary health care as an essential in overall country health programming. If national health authorities decide that drug dependence is a serious social and health problem, then a part of the overall health programme should be a national drug dependence programme based on the best available data and on a realistic assessment of available resources.

Health education.

Behaviour and attitudes conditioned by culture, by the social, economic and family environment, and by learning play a direct role in the development and spread of drug use and drug dependence. Education about the use and misuse of drugs forms part of WHO's health education programme, which is based on the principle that success in preventing and controlling any disease depends *inter alia* on an informed and motivated public. Health education can thus contribute an essential element in any comprehensive plan to decrease the current non-medical use of psychoactive drugs and to prevent further increases.

Global strategy

In order to complement and provide technical support for the WHO collaborative programmes at country level, the Organization has embarked on a programme, in collaboration with other international agencies, based on a global strategy of drug abuse prevention and control. This programme comprises four interrelated activities: development of technology, development of manpower and infrastructure, dissemination and exchange of information, and promotion of inter-country cooperation.

The technology needed for an effective reduction in the demand for drugs has been developed in accordance with the WHO principle that—in order to be appropriate—techno'ogy must be scientifically sound, within a country's means, acceptable to the community, and suitable for widespread application by non-specialised personnel.

—Extracts from the article published in **World Health**, August 1981.

W.H.O.'s Role in Drug Control

W. H. O. has been given responsibility for evaluating available data and making recommendations for the control of narcotic and psychotropic substances. The 1971 Convention requires that WHO "communicate to the UN Commission on Narcotic Drugs an assessment of the substance, including the extent or likelihood of abuse, the degree of seriousness of the public health and social problem and the degree of usefulness of the substance in medical therapy, together with recommendations on control measures, if any, that would be appropriate in the light of its assessment".

During the last three years, WHO has made recommendations to the UN for controls to be applied to 22 substances under the 1971 Convention, as well as five substances under the 1961 Convention. The final decision on these recommendations is taken by the 30-member UN Commission on Narcotic Drugs, a functional body of ECOSOC—the UN Economic and Social Council. The recommendations of WHO to this body are determinative as far as medical and scientific evidence is concerned.

Drug abuse increasing in many societies

The Second (Social) Committee of the Economic and Social Council met on 3 May, 1983 and began debate on its agenda item on narcotic drugs. In her opening statement, Ms. Tamar Oppenheimer, Director of the Division of Narcotic Drugs, said that drug abuse was reported to be increasing in many societies.

Effective preventive measures required a complex variety of interlocking actions. That task could be performed by the formal agencies of Governments of Member States working in isolation. Non-governmental organizations could make a major contribution, a fact that had been emphasized by the report of the Commission on Narcotic Drugs. In the area of prevention, international organizations could serve best as catalysts and as clearing houses for techniques and national experience.

The deteriorating situation in the illicit drug traffic was clearly indicated by the total reported quantities of drugs seized by law enforcement authorities, she said. Nearly six tons of heroin were reported seized from the traffic world-wide in 1981, an increase of 120 per cent over total reported seizures for 1980. The reports on 1982 were unlikely to show any marked improvement.

Nearly two tons of morphine were also reported seized world-wide in 1981. That represented an increase of 27 per cent over total reported seizures for 1980. In addition, 54 tons of opium were reported seized in 1981, but that was only a small percentage of the total illicit opiates available in the traffic.

She stated that trafficking in cocaine also continued to spread at an alarming rate. Reports from ICPO/Interpol indicated that seizures of cocaine had increased by 161 per cent between 1981 and 1982. One single seizure of that drug in 1982 was double the weight of all seizures of cocaine interdicted annually world-wide only eight years ago. Abuse of cocaine continued to increase in the Americas and was also spreading to parts of Western Europe.

Traffickers appeared to be concentrating on production of the more potent preparations of cannabis, she said. In Africa, cannabis cultivation seemed to be reaching alarming proportions in relation to food crops. The aggregate profits from the smuggling of cannabis were much greater than those from trafficking in any other single drug although the profit on individual consignments may be less.

Turning to the psychotropic substances, she said there was an increase of 55 per cent in the total seizures of stimulants seized from the illicit traffic in 1981 compared with 1980. There was also an increase of "over 12,000 per cent" in respect of dosage units of LSD seized world-wide in 1981 compared with the previous year.

There was a rapidly growing availability of depressants, particularly methaqualone, she said. Despite the Commission's 1979 decision to transfer methaqualone to Schedule II of the 1971 Convention on Psychotropic Substances in order to strengthen the control measures, availability had not diminished.

Generally speaking, she said, the pattern was far from encouraging. Abusers were moving readily between drugs, and traffickers employed much the same technique, smuggling alternative drugs to counteract preventive measures. As one State increased national surveillance, gangs of traffickers devised new alternative routes for contraband drugs through less protected States. Major problems were not now confined to the traditional producer and consumer countries for illicit drugs. The demand pattern had now spread to a number of States which were once only used for transit of illicit traffic.

–U. N. Weekly Newsletter,
20 May, 1983

TRADITIONAL MEDICINE IN AN INDIAN CITY

A. Ramesh & B. Hyma

If indigenous medical practitioners are to be integrated into countries' health services, much more needs to be known about where they are, how they practise, and whom they serve. A field survey in Madras showed a wide variation in the quality of services provided by such practitioners and scarcely any cooperation between indigenous and modern medicine. Traditional healers do, however, provide satisfactory care for common local ailments.

Practitioners of traditional medicine represent a vast and valuable human resource outside the official health services (*1*, p. 37; *2*) yet very little is known about the extent of their practices or the methods they use. If the care these practitioners render is to be integrated into national, state, and regional health plans, a systematic effort must be undertaken to learn more about their functioning.

Such an effort has been made in India, where two parallel systems of medical practice are in operation: the modern one, which includes allopathy and homoeopathy, and the traditional one, which comprises ayurveda, siddha, and unani. In addition, the principles of naturopathy and yoga are followed by many people for their therapeutic value. To estimate the persistence of traditional Indian medical practices in a metropolitan environment, we carried out a study in Madras, the fourth largest city in the country, with an estimated population (in 1977) of about three million. Madras is both a major centre of modern medicine and a centre of traditional medicine.

Systems of traditional medicine

Of the three indigenous systems of medicine, ayurveda, the traditional Hindu system of medicine based on the Vedic scriptures, is the one that is practised in all parts of the country. It utilizes herbs, minerals, and dietary restrictions in the treatment of illnesses. Literature on ayurveda dates from the fifth century B.C.

Siddha is extensively practised in the southern State of Tamil Nadu and in the neighbouring States. It, too, is an ancient system. In treatment it uses mainly metals and minerals but some products of vegetable or animal origin as well. Works relative to siddha, of which there are at least 500, plus 3,000 formulae, were written in Tamil, initially on palm leaves. The exact number of siddha practitioners (*vaidyas*) is uncertain, but it is known that there are thousands in the State of Tamil Nadu.

Unani, also known as the Greek/Arab system of medicine, was brought into India by the Muslim conquerors, and has been practised for several hundred years, predominantly in areas of Muslim culture. It uses herbs, minerals, and metallic salts.

Since 1948, following independence, the Government of India has been committed to the promotion and development of the indigenous medical system along with modern medicine. National health policy objectives include instituting standardized education and training in all the ayurvedic institutions and research facilities and training along scientific lines to absorb the practitioners of ayurveda and unani medicine into the State health organization. In 1969 the government set up a Central Council of Research in Indian Medicine and Homoeopathy with four subcouncils: (1) ayurveda and siddha, (2) unani medicine, (3) homoeopathy, and (4) yoga and naturopathy. This council has established minimum

standards of qualification in Indian medicine, a curriculum for undergraduate and post-graduate education and training, and a central register of practitioners.

The indigenous system of medicine is practised by a large number of hereditary medical practitioners and by people trained in teaching institutes run by the State Government and other approved bodies (*3*). India now has many qualified practitioners of integrated medicine—those who, in addition to having studied indigenous medicine in well-organized institutions, have undergone training and practice in the basics of modern medicine, including surgical, obstetrical, and medical legal work. These practitioners use modern diagnostic methods and modern drugs as well as indigenous remedies. Moreover, about 7000-8000 professionally qualified practitioners of ayurveda, siddha, unani, and homoeopathy are entering the profession every year. WHO has described the situation thus: "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. . ." (*1*, p. 12; *2*).

Carl E. Taylor (*4*) has estimated that the organized health services in India provide only 10% of the medical care, that another 10% is provided by qualified physicians in towns and cities, and that the balance is split between home medical care and indigenous practitioners. Though modern scientific medicine forms the basis for the development of the Indian health services, the ultimate objective is to facilitate the integration of traditional medicine and the emergence of one system of medicine with various subsystems. For, despite the expansion of modern health care, there is no indication that traditional systems are losing their influence.

The Research setting and methods

Our analysis of the practice of traditional medicine in Madras focused on the actual distribution and social characteristics of its practitioners. The information was drawn from a sample of 95 practitioners from a total of 957 registered in the city, carefully selected on the basis of postal zones so as to cover the entire city and be truly representative.

It was found that the heaviest concentration of practitioners was in the old residential, highly populated areas of the city, followed by significant numbers clustered in the old commercial and manufacturing sectors. Siddha practitioners, numbering 635, dominated the picture in these areas; ayurveda practitioners (200) did not exhibit any definite pattern with regard to their geographic distribution; and the unani practitioners were concentrated in the same areas as the siddha *vaidyas*.

Organized health services in India provide only 10% of the medical care, another 10% is provided by qualified physicians, and the balance is split between home medical care and indigenous practitioners.

A detailed questionnaire with 35 questions was submitted to the sample of practitioners selected. The subjects covered were: (1) system of practice, (2) practitioner's personal characteristics, (3) training back-

AYURVEDA

India is one of the few Asian countries where Ayurveda has been given due recognition as a system of medicine for providing health care to the people. Although there are references to Ayurvedic principles in Vedic literature written about 2000 B. C., the present available literature on Ayurveda starts with *Sushruta Samhita* and *Charaka Samhita*, compiled some time during the fifth Century B. C. From these ancient documents it appears that education in this science was initially imparted to highly selected groups of students.

The technical methodology of clinical examination is similar to modern medicine, the primary methods being the clinical history and a five-fold physical examination using the five senses. However, greater emphasis is given to the constitutional aspects of patients, their nutritional status and their psychosomatic integrity. The pulse examination forms an important part of the clinical methodology. The patient is examined and treated as a whole, unlike the modern medical approach where a large number of specialists may be involved simultaneously in such an examination.

—Dr K. N. UDUPA

ground, (4) practice, (5) characteristic features of the patients seen, (6) diagnostic methods, (7) prescription of medicine, (8) procurement of medicine, (9) specialization, and (10) attitudes and opinions. Interviews were conducted mostly in Tamil and, where necessary, in English, by two graduate students. On average, each took an hour or more. Participation was voluntary, but most of the practitioners were pleased to respond to the survey.

Findings

The survey revealed that 36.4% of the practitioners belonged to the siddha system, followed by ayurveda (33.2%), unani (10.4%), and integrated (20%). Most of them were male, though there were a few female practitioners, specializing mainly in gynaecology and obstetrics. Two-thirds of the practitioners were between 40 and 60 years of age. Most were Hindu, but a small proportion were Muslim; only two were Christian. More than half had been born and reared in Madras. Nearly half had entered the profession because of its tradition within their family; and 15% indicated that they had a relative who was also practising indigenous medicine.

Despite the expansion of modern health care, there is no indication that traditional systems are losing their influence.

All of the practitioners interviewed were Registered Practitioners of Indian Medicine, and more than half had registered between 1960 and 1978, which indicates a growing interest in indigenous medicine. About a third had a college education: 30 indicated that they had diplomas or certificates and practised siddha or ayurvedic medicine but had received no formal education; the rest had had 8-11 years of schooling. About 34% had had their formal training at the former Government College of Indigenous Medicine, Kilpauk, Madras; the majority, however, seemed to have had no formal training in indigenous medicine but had served apprenticeships to established practitioners. The duration of the apprenticeship had generally been 3—5 years.

More than 80% of the indigenous medical practitioners were engaged in full-time practice, and few had changed the location of their practice since their registration. About a quarter had their clinics in areas where they had acquired them through hereditary practices. Most of them ran their clinics or dispensaries in their own homes, which varied considerably in amenities. High-class and upper-middle-class neighbourhoods did not seem to attract them; middle-income people predominated in the areas where they were located.

About half of the practitioners reported seeing 5-20 patients a day; only 10% said they saw as many as 20-40 patients daily, and we suspected that in some cases such figures were exaggerated. The practitioners said they spent somewhere between 10 and 40 minutes with each patient; and "the more traditional an indigenous medical practitioner was in his approach to diagnosis and treatment, the more likely he was to spend more than 10 minutes with a given patient" (5).

Fees were usually decided upon with the patients at the time of each visit. Generally speaking, the practitioners charged according to their clients' ability to pay rather than according to any fixed consultation fee.

As for their patients, most were between 20 and 50 years of age and were drawn from the immediate neighbourhood of the place of practice.

Few of the practitioners exhibited modern medical instruments such as stethoscopes, thermometers, sphygmomanometers, syringes, and needles; these were used mainly by those who practised integrated medicine. The latter were also the ones who occasionally sent their patients for laboratory tests or X-rays. About 30% of the indigenous practitioners said they performed minor surgery such as suturing, incising, or dressing wounds; but about 25% would not treat patients who required minor surgery.

Most of the practitioners used physical examination such as viewing the patient's body, touching, and eliciting information by questioning.

Nearly two-thirds of the practitioners said they prescribed only indigenous medicines, meaning mostly hereditary formulae prepared from herbs, powders, minerals, etc. Many of their methods and medicines are closely guarded secrets. Most of their medical supplies are obtained from the local cooperative outlet, the Indian Medical Practitioners' Cooperative Pharmacy and Society Ltd., which has been in existence since 1944 and has grown from about 500 members to 8000. This organization manufactures ayurvedic, siddha, and unani medicines—about 750 popular formulations. The profit is kept very low, its major objective being to supply quality medicines at very reasonable cost.

There are some clear indications of the kinds of cases the practitioners preferred to treat. Primary importance seemed to be focused on ailments such

as coughs, diarrhoea, dysentery, fever, and indigestion, followed by skin disorders, ulcers, nervous disorders, rheumatism, and lung and bronchial ailments. Formal specialization is rare. No written records or files are maintained by most of the practitioners: a few who did maintain some records were reluctant to produce them for the interviewers. The practitioners exhibited almost no interest in conducting clinical research on their methods of practice. There seems to be little interaction among the individual private practitioners, though many appear to be aware of the existence of certain others; and there is a sort of informal referral system, especially among the few specialists—those who are known to have particular expertise in treating some specific disorder.

"It seems paradoxical that, at a time when modern scientific medicine appears to be making such giant strides, and enjoying unparalleled prestige, so much interest should be taken in traditional medicine, in both developed and developing countries alike. Traditional practitioners in many parts of the world define life as the union of body, senses, mind and soul, and describe positive health as the blending of physical, mental, social, moral and spiritual welfare. The moral and spiritual aspects of life are here stressed, thus giving new dimensions to the system of health care by which man maintains his health."

—Dr R. H. Bannerman
(World Health, June 1983)

Conclusions

Indigenous medical systems still make a significant contribution to the medical care of the people—not just in rural areas but in cities. In India, the ayurveda, siddha, and unani systems all seem to provide fairly satisfactory solutions to common local ailments; in Madras, however, ayurvedic institutions and clinics generally enjoy more public support than do the representatives of the other two systems.

Lack of standardized training and qualification of the practitioners is still a problem, even though many people are entering the profession every year. There are wide variations in grades and levels of training, with consequent differences in knowledge, skills, and sophistication of practice. Registration of traditional practitioners is still far from complete, which compounds the problem.

Most of the practitioners operate in isolation, and their bargaining power is weak. WHO has recommended encouraging them to form clubs or societies that can act to check harmful practices, eliminate quacks and charlatans, and assure continuous informal education, cultural loyalty, and the conservation of a high level of professional ethics and practice (*1*), p. 32).

Only lip-service seems to have been paid to promoting the process of integrating the traditional practitioners into the general medical services; cooperation between the two parallel systems has hardly begun. WHO has pointed out that training and retraining are necessary on both sides to improve the status of the traditional practitioners among health team members and help acquaint "professional health personnel and students of modern medicine with the principles of traditional medicine in order to promote dialogue, communication and mutual understanding and eventual integration" (*6*).

All indications are that indigenous medical systems will probably continue to provide services so long as Central and State governments continue to sponsor them officially and continue to promote education and training and clinical and pharmacological research. At present, though indigenous medical services freely cut across all socioeconomic groups and are common in both rural and urban areas, they still occupy an insignificant position in health planning. The recent change in WHO policy orientation and consideration may help to strengthen and protect the interests of indigenous medical systems.

A persisting question is whether one should advance the development of a dual health care system from which patients can select modern or traditional health services, or an integrated system, in which traditional systems would, as they do now, play a subordinate role—and eventually lose their individual cultural heritage besides. This policy decision continues to pose a dilemma for the governments of many developing countries (*7*, *8*).

It seems to us that the problem to be tackled first is to determine how to make indigenous medicine rapidly self-reliant and fully efficient; how to upgrade the quality of services provided by the private practitioners of this system; how to give them due recog-

recognition as respected members of society; and how facilitate their participation in national health care programmes.

The complementarity of functions between modern and traditional medicine needs further exploration. Our study has indicated that the practical and survival value of Indian traditional medical practitioners is certainly high. With proper understanding, publicity, and financial support, traditional systems of medicine can play a significant role in the formal delivery of health care both in India and in other countries in which indigenous medicine is still a very vital force.

REFERENCES

1. WHO Technical Report Series, No. 622, 1978 (*The promotion and development of traditional medicine*).
2. KURUP, P. N. V. *World health*, November 1977.
3. KONDAL, R. Y. *Journal of the National Integrated Medical Associations of India*, **19**: 233 (1977).
4. TAYLOR, C. E. The place of indigenous medical practitioners in the modernization of health services. In: Leslie, C., ed *Asian medical systems; a comparative study*. Berkeley, CA, University of California Press, 1976, p. 286.
5. BHATIA, J. C. ET AL. *Social science and medicine*, 5 : 146 (1971).
6. BANNERMAN, R. H. *WHO Chronicle*, **31** : 427 (1977).
7. BIRCHMAN, W. *Social science and medicine*, **13 B**: 175 (1979).
8. DUNLOP, D. W. *Social science and medicine*, **9**: 581 (1975).

Courtesy : WORLD HEALTH FORUM, Vol. 2, No. 4.

There has been some debate on "modern" versus "indigenous" medicine. Today's new is tomorrow's old. Medical knowledge is full of skeletons of theories once believed to be infallible. Science is basically the search for the cause-and-effect relationships in the universe.... Many new discoveries are but reiteration of ancient knowledge which until a few years ago were despised as quackery. And there is new respect and search for the wisdom of the ancients.

—INDIRA GANDHI

(*continued from page 235*)

Nursing being a 'humane calling' has always been very close to the hearts of the people. A nurse apart from being an aide to the doctor has also an independent role to play. It is the nurse who is with the patients round the clock and brings cheer and light to the sick and suffering with her personalized concern and care. Apart from looking after the patient she can take upon herself the role of educating them in the elementary principles of health, hygiene, and nutrition and also enliven the environments. This combination of high degree of professional skill and human approach will make all the difference in the larger context of social well-being.

I hold the nursing profession in high esteem and have great admiration for its members. A nurse is like a mother in showering affection and it is this motherly instinct in them that makes it a most noble and humane profession. Service with a smile is that it proclaims. Wherever you go, you find the same spirit of sacrifice and service that distinguishes the nursing profession, which imparts them with a universal outlook and humanitarian feelings. It is with the idea of developing respect for this profession that these awards should be viewed. It is gratifying that social prejudice in our country regarding this profession is gradually disappearing and the profession has come to be accepted even in our villages where Lady Health visitors and Auxiliary Midwives are rendering a very useful and much needed service, especially to women and children. I am glad that in the National Awards, equal recognition has been given to all these different categories of nursing profession.

—Extracts from the address by Shri Zail Singh, President of India on the occasion of National Awards for nursing personnel on 2 June, 1983

Traditional Birth Attendants Winning Acceptance

PETER OZORIO

Traditional birth attendants (TBAs) are known to deliver from 60-80 per cent of all babies in the Third World. They also care for mothers before and after birth and help with household chores as well. Midwives will continue to deliver most of the world's babies, whether they are trained or not. They also hold high place in village societies and can influence others.

TRADITIONAL midwives were once thought of as "poor relatives" in the family of health workers, but now, with training, they are slowly but surely winning favour with health administrations in developing countries, and the World Health Organization (WHO) is advocating their use as one way of meeting primary health needs.

With good reason too, for traditional birth attendants or TBAs—as they have come to be known—deliver from 60 to 80 per cent of all babies in the Third World. They also care for mothers before and after birth, and, if need be, help with household chores as well.

Indeed, not only are they being counted upon to perform traditional tasks, but also to take on new duties. In some countries, they are responsible for dispensing oral contraceptives, and for helping mothers who wish to regulate births by accompanying them to clinics for counselling. In others, they promote breast-feeding.

Thus, traditional birth attendants are appreciated as never before. Skeptics of their worth have turned believers, and are accepting trained midwives as valued members of the health team, according to a report on ten-year trends carried in WHO's *Chronicle* (Vol. 36, No. 3).

From replaceable to irreplaceable

The acceptance is reflected in a doubling from 1972 to 1982 in the number of countries formally recognizing the skills of traditional birth attendants through schemes of registration, certification, or licensing. It is also seen in the increasing number of training programmes for midwives. There are twice as many now as there were in 1972. Some of which last no more than three days, and others two weeks.

Essentially, training concentrates on methods of safe delivery. The stress is on cleanliness; the need, for instance, to cut the umbilical cord with a sterile instrument and to dress it with clean mate-

rial. Failure to do so could result in neonatal tetanus, a major health risk.

To encourage training, many countries offer incentives to midwives. Some pay stipends, and a few provide uniforms. UNICEF provides them with a midwifery kit, which is among their most prized possessions.

The most telling indication of the newly-won respect of TBAs is seen in the change of attitude of health administration towards them. In 1972, the majority of 37 administrations replying to a WHO questionnaire thought of them as replaceable and their services as an "unavoidable interim measure."

Today that view is held by a minority, with 56 of 64 countries surveyed by WHO considering them as irreplaceable in the decades ahead. "While expanding professional training, countries are also expanding the training of traditional birth attendants", the report states.

Complications of child-bearing

The new situation appears realistic because approximately half a million women die every year, not of disease, but of the complications of child-bearing. And over 10 million children a year die before reaching their first birthday. The activity of traditional practitioners, who have undergone formal training, will help to reduce both maternal and infant mortality rates.

Midwives will continue to deliver most of the world's babies, whether they are trained or not. Training, however, is relatively inexpensive. It will cost, for instance, $92 in Nicaragua, and $17 in Samoa, including the price of the midwifery kits.

It is thus a sound investment, for TBAs, by virtue of the service they render to communities, hold a high place in village societies, and thus can influence others. But even more important is their willingness to work with communities in rural areas.

"With feasible alternatives unlikely to materialize in the near future, the quickest and cheapest way to improve the health of mothers and children is to improve the practices of traditional birth attendants through training", the WHO report concludes. △

TRADITIONAL HEALTH CARE

The traditional healers, herbalists, spiritualists, and birth attendants constitute a vast resource of practitioners outside the official health services. Their methods of diagnosis and treatment vary from region to region, and some of their practices are similar to modern medicine. For example, in certain tribal communities the traditional healer applies his ear close to the patient's chest to listen to the heart beats and diagnose disease.

—World Health,
—Nov. 1977

PHYSICAL FITNESS —What it means

DR S. K. MANCHANDA

THERE are people who may not walk 10 to 12 miles everyday. Their life may consist mostly of using the bus/motorbike/car to reach the office. spend 6—8 hours on desk work/conference table interrupted by an hour or so for lunch and then come back home for another meal and sleep. Depending upon the age group and the general type of physical activity they may undertake, they will be having various grades of physical fitness. They are also the people who are more likely to get diseased.

Physiologically speaking each individual has a lot of potential to get the maximum from the human machine by way of physical work. Thus, as the severity of work increases a normal adult has the capacity to increase his heart rate from about 70/min. to about 200/min. his cardiac output from a mere 5 Litre/min. to almost 35 Litre/min., pulmonary ventilation from 6-7 L/min. to almost 70—80 L/min. oxygen consumption from ¼ Litre/min. to almost 2.5 or more Litres/min., and so on. The human machine has also brisk reflexes. If an individual has the capacity to mobilize the activity of his heart and lungs to achieve a particular task, within a short period of the accomplishment of the task, the body achieves back the normal levels of heart rate, cardiac output and respiration. Thus one is fit again to meet another challenge.

The capacity to meet the challenge is compromised depending on the extent of unfitness. When one is not indulging in any conscious activity, i.e., sleeping or lying down, minimum energy is being spent, minimum oxygen is being consumed and the heart rate and cardiac output are also at minimal levels. On the other hand when one is taking a brisk walk, say at 7-8 km/hours, or cycling or climbing stairs, running or some form of hard manual labour, more energy is required, more oxygen is required, both circulation of blood and activity of lungs have to be augmented. More vigorous the activity of the musculoskeletal system, more will be the mobilization of the activity of heart and lungs. The fittest person may achieve the maximum mobilization. The least fit may not be able to accomplish even the minimal cardiopulmonary requirements for going to the toilet.

There is a lot that you can achieve by being physically fit, *e.g.*, you will be able to:

i work physically harder and faster for longer periods so that everyday chores become easier,

ii meet the ordinary demands of everyday life and still have energy left over for unnexpected demands and sudden stresses,

iii take part in games and sports without getting exhausted,

iv keep your joints mobile and your body supple so that you can bend and stretch without causing strain.

v keep your body in good working order and so ward off aches and pains,

vi feel healthier and more alive,

vii protect your body from heart attack and some other disorders,

viii enjoy life more.

A person who is really fit is *supple, strong* and has *stamina*.

Flexibility is the ability to bend, stretch, twist and turn when you want to.

Mahatma Gandhi felt that a person is healthy if he is free from all diseases and can carry on his normal activities without fatigue. According to him such a man should be able to walk with ease 10 to 12 miles a day and perform ordinary physical labour without getting tired. This may as well be taken as a definition of a fit active man ready to respond to the environmental challenges. Such a person is fighting fit but not necessarily an athlete for top class competitive sports or a prize fighter.

Strength is extra muscle power used for those unexpected heavy jobs like pushing a car or even a cupboard.

Stamina is the staying power, endurance, the ability to work harder for longer.

How fit are you?

The best way to test fitness is by exercises involving continuous rhythmic movements of large muscle groups such as those of the arms, legs and trunk. But if you are very unfit, it is pointless to test fitness by this method. As a rough guide try to answer the following questions:

1. I can feel my heart thumping after a few flights of stairs.
2. I am left gasping for breath even if I run only a short distance.
3. It is a terrible effort to bend and tie my shoe-laces.
4. I am tired out after doing only an hour or two of house work.
5. I am tired out after carrying two bags of shopping for about 400 meters.
6. I avoid physical effort if I possibly can.

If the answer is *yes* to any one of these questions and one is not pregnant and generally in good health, one would benefit by being more active and take an exercise schedule.

A simple test

If the answer is *no* to most of these, then possibly you are fairly fit, you can undertake more exact and precise tests to find out the level of your fitness. One such test is very simple and is given below:

Jog gently and easily for about 1.5 kilometers. A person between 35—45 years who jogs regularly should be able to accomplish it within 10 minutes flat without undue breathlessness or other discomfort. During the test and immediately afterwards he should be able to carry on an ordinary conversation. However, the time taken to cover the distance depends on age and sex, *e.g.*,

Age	*Men*	*Women*
Under 45	10 minutes	12 minutes
46—50	11 minutes	13 minutes
51—55	12 minutes	14 minutes
56—60	13 minutes	15 minutes

The road to fitness

(a) *Exercise programme for fitness*: There are a large number of programmes which are popular in various countries. Various programmes for raising the levels of suppleness, strength and stamina respectively are available. It may be cautioned, however, that one must not overdo it. If you have ever suffered from a heart attack or high blood pressure, you have chest trouble like bronchitis or asthma, have spells of fainting or dizziness, some trouble with bone and joints, *e.g.*, arthritis or you are recovering from a recent operation or illness, consult your doctor and have a medical check-up done before starting on the exercise programme.

(b) *Smoking and fitness* do not go together for smoking is very harmful for the lungs, heart and blood vessels. The efficiency of these organs is decreased and affects first of all the stamina of the individual and later affecting other aspects like strength and suppleness. Smoking is the single most recognized cause for atherosclerosis heart attack and lung cancer. Stop it altogether. There is no halfway.

(e) *Fatness and fitness* do not go together either. Some methods of shedding weight by exercise programme and diet control should be undertaken.

(d) *Alcohol and fitness*: Keep watch. The watchword is moderation. The concept of moderation may differ from person to person. It is better to stop it altogether.

(e) *Yoga, Relaxation exercises and fitness*: The efficacy of *yogasanas* and some yogic exercises like *Surya Pranam* is well known, possibly on account of the simultaneous mental poise that is produced. Life is full of various types of stresses. The system of physical and mental exercises provided by *Yoga* perhaps is the best but it does not replace the aerobic exercises.

Monitoring the programme

A simple test has been given. This can be used. More precise tests are available. The physiological monitoring of the programme aims at exercising muscles so vigorously as to attain a level of heart rate that is advisable for a particular person depending on his age and sex, and maintaining that heart rate for a period of at least 20 minutes.

Physical fitness and prevention of disease

Being physically fit is very important from the point of view of prevention of disease, especially diseases of heart, blood vessels and lungs. It is interesting to observe that at least the diseases of heart and blood vessels are no longer the first killers in U.S.A. This has been achieved essentially by two pronged approach: (1) make available the emergency care fast enough, and (2) awareness about the requirements for physical fitness and various types of fitness programme, through public education in health sciences. Sooner the various colleges implement physical fitness programmes in their extension services, the better and more economic it will be.

Physical fitness and performance in sports

It is generally recognized that our players in games like hockey, football, tennis and many athletic events, etc., do not lack skill, dexterity or ability to manoeuvre, but their grading in physical fitness leaves much to be desired. Possibly this is due to lack of appropriate programming and monitoring for physical fitness. Knowledge is available. Application of knowledge will help.

—*Courtesy*: **All India Institute of Medical Sciences**

Patient education important in diabetic treatment

The importance of educating the diabetic was highlighted by Dr Asha Vakharia at the conference of general practitioners, held in Bombay.

"Education of the diabetic is the cornerstone in the treatment of diabetes—the diabetic who knows most lives the longest and the best", she said while reporting a study on the management of diabetes by general practitioners.

General practitioners were sent questionnaires asking for information on patients and treatment methods. 113 completed forms were received. The data showed that the majority of doctors advised their patients on the importance of regular check-ups (blood and sugar), ideal weight and controlled diet. "This is highly rewarding in the long run to our patients and very satisfying to ourselves," Dr Vakharia remarked.

According to the data, diabetes was most frequently diagnozed in the 30-50 years' age-group. The majority of patients were in the middle or upper-income bracket. Although obesity was common, especially in women, there was a high incidence of underweight and malnutrition.

Most of the patients were well-controlled, either on insulin or anti-diabetic drugs. Regular blood-sugar tests for monitoring therapy were also performed in the majority.

Dr Vakharia's study also showed that "we all need to brush up on nutrition and diet principles. Without proper knowledge of diabetic diet requirements and food exchange values we are in no sound position to advise our diabetic patients, and the earlier we remedy this the better will be our management of diabetic patients".

—*Courtesy*: **Medical Times. April/May 1983.**

HOSPITALS AND SOCIETY AND THEIR EXPECTATIONS

DR T. R. SACHDEVA
and
DR (SMT) TRIPTA BHASIN

The hospital has come to be recognized as a place where one would get active medical treatment, get cured and could look forward to a better future.

THROUGH the time since the first hospital was founded in 600 A.D., hospitals have established themselves as an integral part of the society. The role of the hospital has over the time undergone a tremendous change. The first hospitals were set up to cater to those of the old and infirm who had no one to look after them. The present day hospitals have taken upon themselves the role of providing better health to the community. In India which had its own system of medicine, family as a unit took upon itself the care of its old and infirm, and the hospital came to be recognized as a charitable institution. Only in the recent times, as a part of modern system of medicine brought in by the British, here too the outlook of the society towards the hospital has gradually changed. From a charitable institution where a certain death was awaiting for some one going there it has come to be recognized as a place where one would get active medical treatment, get cured and could look forward to a better future.

India being a welfare State the Government has taken upon itself the onus of providing better health to its people. The emphasis, therefore, has shifted from the care of an individual to that of the community.

Functions of a hospital

With the new concept of health care wherein the health of the community as a whole has to be looked after, the role of the hospital has also changed from providing only medical care to total health care of the community. World Health Organization experts committee has defined hospitals as integral part of a social and medical organization, the function of which is to provide for the population complete health care, both curative and preventive and whose out-patient services reach out to the family in its home environment. The hospital is also a centre for the training of health workers and bio-social research. These functions are summarized below:

1. *Restorative*

   (a) diagnosis: as an out or in-patient services,

   (b) treatment of diseases: curative and palliative involving medical, surgical and special procedures,

(c) rehabilitation: physical, mental and social,

(d) care of emergencies: accidents and disease.

2. *Preventive*

(a) supervision of normal pregnancy and child birth,

(b) supervision of normal growth and development of children and adolescents,

(c) control of communicable diseases,

(d) prevention of prolonged illnesses,

(e) prevention of invalidism, mental and physical,

(f) health education.

(g) occupational health.

3. *Educational*

(a) medical undergraduates,

(b) post-graduates: specialists and general practitioners,

(c) nurses and midwives,

(d) medical social workers,

(e) other allied professions.

4. *Research*

(a) physical, psychological and social aspects of health and disease,

(b) hospital practices, technical and administrative.

Centre of learning

The modern hospital, whether it be a general hospital or one of the many special hospitals, has been accepted by the people of the world as the centre of learning specialized medical care of high quality. The tradition of unstinted service, sympathetic understanding, profound patience, kindness and sense of privilege at being allowed to serve the sick in body, mind and spirit, which characterized the hospitals of early Buddhist, Christian and Islamic civilizations, has survived the centuries to become a fundamental characteristic of the modern hospitals the world over.

Whereas the society at large looks to the hospital for providing various services, the personnel working in the hospital too form an integral part of the society itself.

These relationships can thus be better understood in terms of:

Personal—*i.e.*, the patient,

Society—meaning the providers/Government,

Professional—Doctors/Nurses/Para-medical staff, etc.

Medical/Health care within the hospital is carried out in a situation where interaction between the three becomes very important. They have different goals/values, expectations, limitations and pressures. Expectations are always based on the goals and values.

The society no more views its health care benevolence towards the people by the medical profession but demands care as a matter of right. Approximately two-third of total health expenditure has till recently been accounted for the urban health Institutions of which the hospital is a part. The services actually provided to public have taken very little of the budget.

Expectations of Society

Expectations of the society from the Hospital in providing good medical care include:

1. *Accessibility*

(a) Personal access services should be available to the patient at different points of entry, *i.e*, out-patient department of the hospital, etc., to a reasonable extent based on expectations of the people.

(b) Services must be comprehensive. Patient should not be obliged to go to one Institution for one type of care and to another hospital for other type of care.

(c) Quantitative adequacy: There should be enough facilities that a patient who needs immediate attention gets if without any difficulty.

2. *Quality*

The concept of quality differs from community to community as it depends on goals, values, etc. The quality may thus be judged in terms of :

(i) Professional competence—In India professional degrees are the parametres of competence. There should be some rational system to judge the competence capabilities and competence of different professionals.

(ii) Acceptibility by the people.

(iii) Qualitative adequacy—always match the need with the resources employed.

3. *Continuity*

Whenever there is a need of entering the medical care second time, a continuity may be maintained with the previous episodes, i.e, availability of previous records of the patients. This is possible when there is proper record maintenance and the methods of co-ordination are employed.

4. *Efficiency*

In respect of the cost benefit and cost effectiveness of the resources provided, the major defects are that:

(i) The beneficiaries of the system have been the urban and privileged classes.

(ii) The system is more curative than preventive.

(iii) It has placed higher value on techniques and less on the needs of the society.

(iv) Agent of care has become a professional elite and over urbanized specialist who rather than having good inter-personal relationship with his patients has become a mystified person for them.

(v) We have developed an infrastructure/organization to suit the technology borrowed from the west rather than choosing a technology that meets our own demands.

(vi) The pharmaceutical industry and the medical profession have come together with vested interests wherein the burden of expensive treatment falls on the patient. The direction to the pace of medical development instead of being given by the medical profession itself is being given by the drug industry.

(vii) The system has been planned, directed and operated by bureaucracy. This has excluded the factor of community participation.

(viii) The system has not educated the community on the problems it faces in providing good medical care as per their expectations.

Conflict of expectations

1. Hospitals are yet to form a part of the community. Presently they are confined more to the patient and not to his surroundings.

2. Social habits of the patient are not generally known to the doctors.

3. Hospital culture is different from that of the society as it is based more on the hierarchy of technical knowledge and becomes too impersonal.

4. Patient wants complete revival and recovery and at times rejuvenation which is not possible in the hospital because of the limited resources. Hospital can only provide medical treatment and can help in the revival of the patient.

Rest is done in the home environment which leaves a big gap between the hospital and the society as follow-up of the case is not always possible in the home environment. The approach of the modern hospital is the super market approach which is convenient, comprehensive and efficient but impersonal. It leads to dissatisfaction of the patient and the doctor, as the human beings need more personalized attention.

The hospital being an integral part of overall social set up has certain problems. A few of these are:

1. Lack of coordination at the regional levels leading to duplication of efforts which contribute to wastage of already scarce resources.

2. Lack of integration between hospital and community health services.

3. Dissatisfaction among the staff at all units due to lack of promotional avenues, inadequate compensation for the arduous talks they are supposed to perform, etc.

4. Lack of a clear approach. Our hospitals though supposed to follow the socialistic approach have not been able to do so due to lack of resources.

5. No clear objectives of the hospital have as yet been laid down.

The hospital in India can thus be considered as an Institution at the cross roads where at one end it is expected to cater to the needs, expectations and hopes of the population which looks towards it for better health, while on the other the needs, expectations and hopes of the staff working within the hospital have to be looked into. This conflict of goals coupled with the scarce resources has led to the present situation. With the increasing awareness among the society in general and the professionals in particular and the increased resources that are likely to be available within the framework of overall development, we can hope that the hopsitals of tomorrow will definitely become temples of health. △

HEALTH EDUCATION : Cornerstone of Primary Health Care

First and foremost among the components of primary health care is health education, and the subject of the Technical Discussions during the Thirty-sixth World Health Assembly was New Policies for Health Education in Primary Health Care.

THOSE misty pictures sent back by satellites clearly show our mother earth as one single, if not very big, unit of the universe. No longer is any imagination needed to perceive that it is round and limited in size. Seen from above and from so far away, all appears peaceful and well-ordered on our planet, whereas in fact it is the scene of endless struggles, strife and atrocities.

One of the outstanding injustices of our time is that millions of people are denied the possibility of obtaining health care. Some inequalities due to natural causes may be inevitable but those caused by humans must be remedied. That is what the World Health Assembly seeks to do by mobilizing all the WHO Member States behind the objective of Health for All by the Year 2000. And the count-down has begun—only 17 years remain in which to carry out this vast project that is to mark the advent of the new century.

The objective of Health for All by the Year 2000 can be attained only through a planned overall strategy. Such a plan was outlined at the Alma-Ata Conference in 1978 when primary health care was selected as the key strategy for the practical achievement of health for all. This idea produced some sceptical smiles from people who pointed out that we should never be rid of the sick, the unfit and the disabled. That is obvious but is not the point. Health for all means a world where individuals, families and communities all have access to essential health care and better protection against illness in their homes, at school, on farms and in factories. That world will at least be freed from preventable diseases and man-made hazards.

First and foremost among the components of primary health care is health education, and the subject of the Technical Discussions during the Thirty-sixth World Health Assembly was *New Policies for Health Education in Primary Health Care*.

As a subject, health education has not always been very clearly defined. What is really meant by it? WHO says that it is "any combination of information and education activities leading to a situation where people want to be healthy, know how to attain health, do what they can individually and collectively to maintain health, and seek help when needed."

Some new activities

This definition implies that health education should include a number of new activities in addition to the old ones. First of all, it should foster community involvement, which is essential for lasting success in any programme whether in education or anything else. The notion of community participation is, of course, an old one. It was advocated by the authors of the WHO

constitution in 1948 when they included the following principle in the preamble to that historic document: "Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people."

Incentives exist for populations to become actively involved and take responsibility for certain decisions and activities jointly with the health workers. A good health worker should know the most appropriate ways to obtain both individual and community involvement. For example, he or she will encourage a community to identify its health problems, discuss various solutions and establish straightforward and realistic objectives. The community will then be able to follow through in the execution of the different phases of the project.

Communities must formulate their priority needs or at least their felt needs. Contrary to a common belief of economists and planners, there is no occasion for a dilemma to arise between the establishment of an overall plan comprising the allocation of central resources and the principle of community involvement. To be truly national, any new policy must be built up from the grass roots. What is more, such a policy should thrive on the input from community involvement. In many countries the tendency towards decentralization highlights the need to facilitate community involvement in town or village management. Of course problems will arise. Communities may set goals they cannot reach unaided, either for financial reasons or because other sectors are also concerned in the proposed projects.

The need to arrange for simultaneous or successive intersectoral action makes it more difficult to reach the objective. In a malarious village, for example, efforts to improve community health may begin by environmental sanitation measures and the elimination of mosquito breeding sites, the aim being to strike at the cause of the disease concurrent with an attempt to cure its victims. In some circumstances, efforts in the field of environmental sanitation may easily run into complications. In such cases, the best alternative is to encourage and stimulate intersectoral cooperation by helping all the partners to see the need for and the utility of joint action. Because of their communication skills, health education specialists are better placed than others to convey the message and convince everyone concerned of the necessity of working together.

There is always a risk that change and innovation will upset the local people and lead to resistances that may be hard to overcome if due attention is not paid to traditional attitudes and the dynamics of social and cultural change. The technology employed must be appropriate to the needs, aspirations and cultural level of the people. Health education specialists will further the dialogue that should take place between professionals and non-professionals so that appropriate technologies are adopted, and will see to what extent the felt needs of the people and the epidemiologically proven needs may overlap. The wider the common ground established between these two classes of need, the more effective the work of the health team will be.

It is thus clear that health education functions and tasks may be different from what they used to be. Indeed, they have become so much broader and more diversified that it may be questioned whether the people concerned are properly trained to perform them.

Resistance to change

There is no denying that, in many cases, a shift in current training programmes is necessary. As has been stressed in the WHO Seventh General Programme of Work, "manpower policies, where they exist, often have little relevance to the long-term and changing needs of the health system and the communities and individuals within it."

Change may invite resistance, and it is to be expected that administrators, faculty and even the students may oppose any innovations in the teaching programmes tending to make learning less "academic" and more realistic and to widen the multidisciplinary approach. The reorientation of teaching programmes will only become a reality, therefore, if political commitment to primary health care exists at the policy-making level.

Health education must be the concern of all health providers irrespective of their position in the health care system. Nevertheless, specialized staff in health education are needed, and at all levels, central, provincial and local. They must train other health workers and assist in the planning, implementation and evaluation of health programmes including the coordination of resources.

Information and education

For such specialized staff, the mass media are of particular importance. In promoting primary health care a continuum of action is essential, ranging from advocacy and the developing of awareness to working with individuals and communities in drawing up plans, carrying out activities and monitoring action. At one end, information spearheads the movement while, at the other education complements it by an "in-depth" action. The use of mass media and direct communication between individuals are complementary and mutually beneficial.

(continued on back inside cover)

THIRTY-SIXTH WORLD HEALTH ASSEMBLY

The Thirty-sixth World Health Assembly was held from 2–18 May, 1983, in Geneva. We publish below a brief report of the proceedings of the Assembly which discussed among other topics the progress towards the goal of 'Health for All by the year 2000', International Drinking Water Supply and Sanitation Decade Programme and Tuberculosis Control in the World, etc.

THE THIRTY-SIXTH World Health Assembly opened in Geneva on 2 May, 1983. About 1,000 delegates from 160 Member States of the World Health Organization (WHO), including, 70 health ministers, as well as representatives from the Canton of Geneva and international organizations, attended this Assembly.

Malaysia's Minister of Health, Chong Hon Nyan, was elected President of the Thirty-sixth World Health Assembly, the governing authority of the World Health Organization. He succeeds Mr Mamadou Diop, Minister of Health, Senegal.

Call for collective policies

In his address to delegates, Dr Halfdan Mahler, Director-General, W.H.O. called upon countries to "adhere to our collective policies".

He said, "while we have been striking ahead with singleness of purpose in W.H.O. based on your collective decisions, others appear to have little patience for such systematic efforts, however democratically these are applied. . . ."

Dr Mahler referred to such initiatives as the selection by people outside the developing countries of a few isolated elements of primary health care for implementation in these countries: the parachuting of foreign agents into these countries to immunize them from above; the concentration on only one aspect of diarrhoeal disease control without thought for the others. He said: "initiatives such as these are red herrings that can only divert us from the track that will lead us to our goal. They belong to the distant past of international meddling with national health affairs..."

"...That is an abrogation of the very principle of national self-reliance. Of course, outsiders are entitled to identify those parts of your strategies that they are willing to support, but that is quite different from insisting that you pay undivided attention to these parts," he added.

Man-Induced afflictions

The President of the Thirty-sixth World Health Assembly Chong Hon Nyan called upon developing countries to "cope with man-induced afflictions as seriously as those brought about by nature and a hostile environment."

He said that the problems "once thought of as being the by-products of affluence," and consequently the sole concern of the industrialized world, are now besetting the Third World.

"Lifestyles are no longer purely conditioned by climate or culture, they are imitated as fast as communications can speed images from one country to another."

Alcoholism, drug abuse, addiction, smoking, psycho-social illnesses, and cardiovascular diseases therefore should be "seen in the same light" as communicable diseases such as malaria, cholera, tuberculosis, and leprosy.

As modern ills afflict the young particularly, he asked delegates "to take a stand against those who, in the name of permissiveness and liberalism, would want to see our youth destroyed by the misuse of drugs."

He urged delegates not "to lay all our problems at the door of those more fortunate than us" saying "that is a temptation that should be resisted—as each country, in its health care programmes, must be the best judge of its own capacity and priorities."

Tooth decay in Third World

For the first time ever in 1982, more people in the developing world were victims of tooth-aches than those in the developed world, according to a report (Strategies for programmes for oral health A36/INF. DOC./2.) presented to the 36th World Health Assembly.

That is one indication why the state of oral health today is deteriorating in most countries of the Third World, and particularly in urban areas, while it is improving in the industrialized world.

This represents a sharp reversal of trends from two decades ago, and is attributed to preventive programmes against both dental caries, and periodontal diseases (diseases of the gum and tissue around the tooth). While such programmes are carried out by developed countries, they are, in large part, neglected by developing countries.

The prevalence of dental caries is recognised as the chief indicator of oral health trends. According to experts of the World Health Organization (WHO), the average number of caries in a population is gauged by an index, based on a count of teeth "decayed," "missing," and "filled" (DMF) in a person at age 12.

DR HALFDAN T. MAHLER APPOINTED FOR THIRD TERM AS DIRECTOR-GENERAL

Dr Halfdan T. Mahler was appointed by the Thirty-sixth World Health Assembly for a third five-year term as Director-General of the World Health Organization (WHO), on 5 May, 1983.

In accepting the appointment Dr Mahler said he did not think any other international organization had succeeded in reaching unanimous agreement on a world-wide policy with such profound implications for the people who inhabit this planet, and on a specific strategy for putting that policy into practice. "At the same time," he said, "I have no illusions about the difficulties you have to face in pursuing your strategies for health for all, whatever the level of social and economic development of your country. Quite apart from internal obstacles, the world political and economic climate hangs over us all like an ever-present sword of Damocles. Yet we have been singularly successful until now in guiding our Organization between the mine fields of international political and economic turmoil. I consider it essential that we continue to follow that route. The route to Health for All that we have mapped out together is amply wide to make it unnecessary to trespass on others' territories. All of us in the United Nations system have our special roles to play in the economic and social fields, and of course the United Nations General Assembly and Security Council in their political fields. If we allow ourselves to be lured astray into fields beyond our constitutional competence, I am afraid we will find ourselves in these very mine fields that we have been trying to avoid in the interest first and foremost of the health of the deprived people in the Third World."

An index of up to 1.1 is rated "very low" in caries; from 1.2 to 2.6, "low;" from 2.7 to 4.4, "moderate;" from 4.5 to 6.5, "high;" and above 6.6, "very high."

According to targets set in 1979, the goal is an average of a 3 DMF-teeth index for all countries by the Year 2000.

Although health officials believed that the prevalence of dental caries "could be halted for most of the developing countries at, or below, the level of 3 DMF-teeth," that is not as yet proving to be the case, the report states.

Recommendations

The Thirty-sixth World Health Assembly ended in Geneva on 16 May, 1983 after approving a programme of activities in support of the goal of Health for All by the Year 2000.

Dr Mahler, who was appointed for a third five-year term as Director-General starting in 1984, said: "The worldwide struggle for health is unique in having an explicit goal, a well-defined policy and a carefully thought-out strategy for attaining it, all unanimously adopted by governments representing almost the whole of humanity."

He went on: "WHO's investments will have to be much more specific than universal seed money to all programmes." Indiscriminate seeding could give rise to too many flowers. High selectivity *in* countries *by* countries would be necessary to ensure that WHO's cooperative activities had highest relevance to the mainstream of each country's health system.

The international economic situation made it necessary to propose a programme with no real increase in budgetary terms. There was, however, ground for optimism about achieving the goal of Health for All by the Year 2000, provided WHO's resources and all other available resources were used wisely to promote and support the essentials of the Strategy for Health for All, and provided Member States shared full responsibility for these actions. With the image of the garden in mind, Dr Mahler explained: "It is not so much the pruning of individual plants that is required; it is better planning of the garden. And each country has its own horticultural needs."

First Award of the Child Health Foundation Medal and Prize

In recognition of his outstanding service in the field of child health, Professor Bechir Hamza (Tunisia) was awarded the first Child Health Foundation Medal and Prize by the President of the Assembly. He is the author of over 150 reports and publications on paediatrics.

The Foundation was established at the initiative of Professor Ihsan Dogramaci of Turkey.

The Assembly tackled an agenda comprising 35 items, and gave its final approval to 35 resolutions. Some of the more significant are summarized here.

Implementing the strategy for Health for All

This resolution, proposed by the non-aligned and other developing countries, expressed continuing political commitment and vigorous efforts to attain the goal of Health for All. It requested the Director-General to mobilize support for these and other countries to implement their Health for All strategies, and to encourage technical cooperation among them with this goal in view.

Effects of nuclear war on health and health services

The Assembly considered a report on the effects of nuclear war on health and health services, prepared by an international committee of experts in medical sciences and public health under the chairmanship of Professor Sune Bergström (Sweden).

The Assembly endorsed the committee's conclusions that it is impossible to prepare health services to deal in a systematic way with a catastrophe resulting from nuclear warfare, and that nuclear weapons constitute the greatest immediate threat to the health and wel-

Shousha Foundation Medal and Prize

Dr Suliman Subeihi, Under-Secretary of the Ministry of Health of Jordan, was awarded the A. T. Shousha Foundation Medal and Prize for "rendering significant health services in the geographical area in which Dr A. T. Shousha served the World Health Organization."

Over the years, Dr Subeihi made significant contributions to the development of preventive medicine services in Jordan, particularly in the fields of school health, communicable disease control and health education.

fare of mankind. WHO was asked to continue the work of collecting, analysing and regularly publishing further findings about the effects of nuclear war on health.

Prevention and control of heart diseases

The Assembly was satisfied that appropriate technology now exists to prevent and control a growing number of cardovascular diseases such as rhematic heart disease in children, coronary heart disease and cerebrovascular accident resulting from hypertension. It asked the Director-General to mobilize greater extrabudgetary support for global, interregional, regional and national activities within WHO's long-term programme in this field. It also commended the report of the WHO Expert Committee on Prevention of Coronary Heart Disease, which gives detailed guidance for developing national strategies to prevent and control such diseases.

Oral health in the strategy for Health for All

Recognizing that oral health is deteriorating at an alarming rate in many developing countries, the Assembly requested the Director-General to mobilize available resources in setting up an International Collaborative Oral Health Development Programme.

Tuberculosis control

Noting that little improvement has been achieved in controlling tuberculosis in the developing countries over the past 20 years, the Assembly requested the Director-General to make all possible efforts through collaboration between the WHO Action Programme on Essential Drugs and the pharmaceutical industry to ensure that the most effective medicaments become more widely accessible to developing countries.

Role of nurses and midwives

The Assembly called upon nursing/midwifery personnel and their organizations everywhere to support WHO's policies aimed at promoting primary health care, and to use their influential position to support training and information programmes relating to primary health care.

Alcohol-related health problems

Member States have drawn up comprehensive national policies to deal with alcohol-related problems, giving priority to preventive work and paying particular attention to populations at special risk. WHO was requested to intensify its work in this area and to "use all possible mechanisms for drawing attention and giving publicity to health problems related to alcohol consumption."

International Drinking Water Supply and Sanitation Decade

Member States were urged to speed up national policies and to give priority to underserved urban and rural populations, bearing in mind that improved sanitation should go hand in hand with the provision of safe water. A vigorous effort by all concerned was essential to ensure progress towards the targets of the International Drinking Water Supply and Sanitation Decade (1981-90), with almost a quarter of the Decade already gone.

(Continued on back inside cover)

National Awards 1981 and 1982 for Nursing personnel

TEN NURSES RECEIVE AWARDS

The President, Shri Zail Singh, gave away the National Awards 1981 and 1982 for Nursing Personnel at a colourful function at Rashtrapati Bhavan on 2 June, 1983. Seven nurses, two auxiliary nurse midwives and one health visitor received the award.

They are: Kumari Marion Ethel Hodgson, Kumari A. Kuruvilla, Smt. Stayly Bonie Khonglah, Smt. Flewrina Kharlukhi, Shri G. Sandanasamy, Major Kum. P. Easwari, Kumari Shuva Das Gupta, Smt. Grace Stephen, Smt. M. Arthur and Smt. Ashabai Martandrao Kulkarni.

In his welcome address, the Union Minister for Health and Family Welfare, Shri B. Shankaranand said that nurses today not only contributed effectively in rendering services in rural and difficult areas but also served the chronically ill, old and infirm patients in their homes. He commended the efforts of all nursing personnel who played a vital role at all levels of primary health care which was an integral part of the national health system.

The Health Minister further said that there are 300 nursing schools in India attached to various hospitals imparting certificate courses in nursing of three and half years duration. About 7,000 nurses qualify from these schools. These nurses basically meet the needs for staffing hospitals at all levels from primary health centre level hospital to medical college hospital. Apart from the above certificate schools of nursing attached to various hospitals, there are 21 colleges affiliated to various universities in the country which award B.Sc. degree in nursing and four colleges which prepare nurses at postgraduate level with specialization in community nursing, medical surgical nursing, paediatric nursing and psychatric nursing, etc. These nurses mainly meet the teaching and administrative requirements for the nursing schools, hospitals and colleges and community. About 6,000 Auxiliary Nurse Midwives are also being trained every year. They alongwith male health workers and health supervisors form the pivot in the delivery of primary health care to the community.

Kumari Kumud Joshi, Deputy Minister for Health and Family Welfare thanked the President for distributing the awards to the nursing personnel. Δ

NURSING A NOBLE PROFESSION

SHRI ZAIL SINGH

President of India

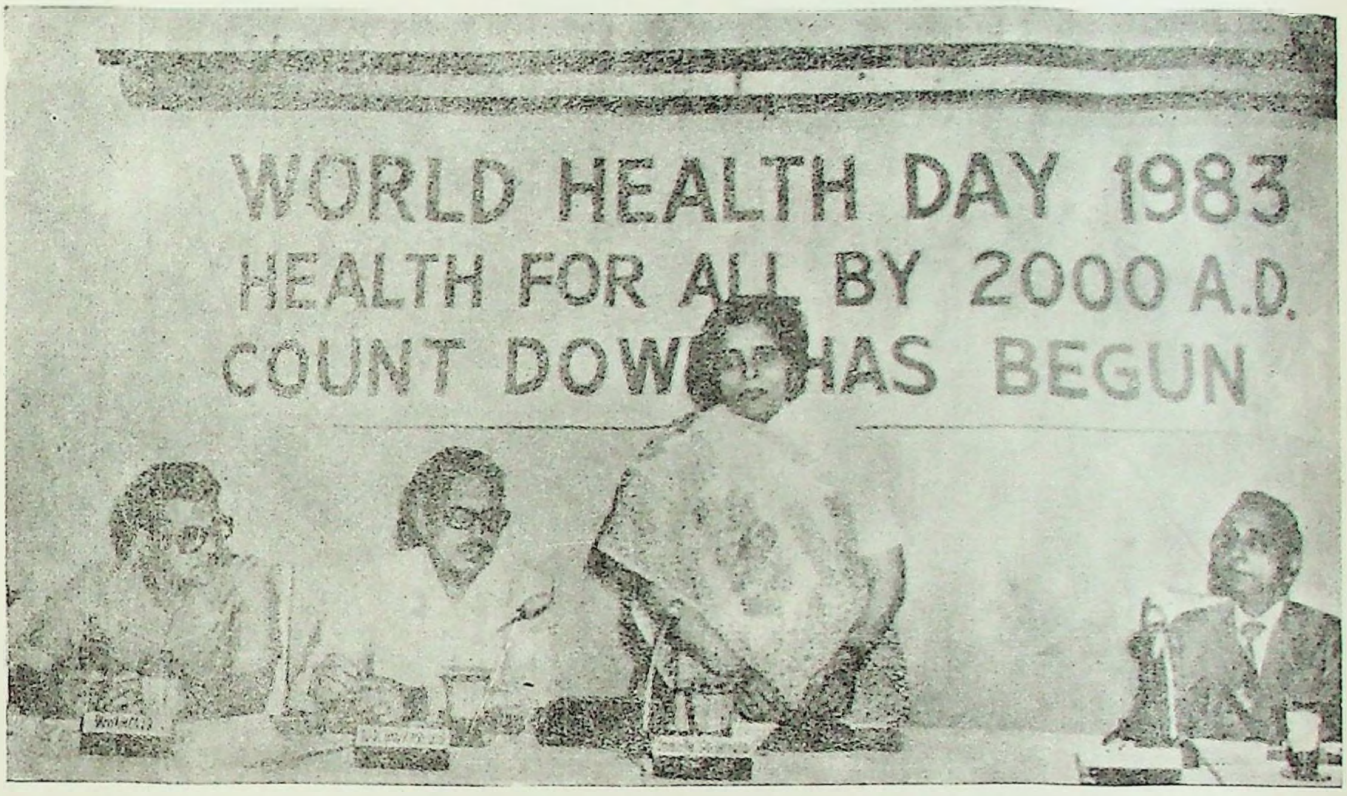
I am glad to observe that in recognition of the importance of the nursing profession to the community at large, National Awards are given annually to Nurses, Lady Health Visitors and Auxiliary Nurse Midwives who have distinguished themselves in the performance of their duties.

On an occasion like this, the name that comes foremost to one's mind is that of Florence Nightingale who fought with courage and conviction the prevailing prejudices against this profession, which has since come to be recognized as one of the noblest callings. In our own times Mahatma Gandhi, the Father of the Nation, lost no opportunity of nursing the sick and the suffering. He did not hesitate to nurse even leprosy patients in his Ashram. Throughout our history we have had shining examples of saints and savants who, through love and compassion undertook to nurse back to health the most down-trodden and neglected members of society. Today, Mother Teresa is a beaconlight bringing hope and cheer to the life of the poorest of the poor. Isn't it a matter of pride and privilege for members of the nursing profession to be following in the footsteps of such great saviours of humanity?

Our country has committed itself to provide 'Health for All by 2000 A.D.' What does this 'Health for All' mean? The World Health Assembly referred to it as the attainment by all the people of the world of a level of health that will permit them to lead a socially and economically productive life. This simply means that the level of health of individuals and communities will permit them to fully harness their potential physical and mental energy, and to derive social satisfaction of being able to realize whatever latent intellectual, cultural and spiritual talents they have.

The primary health care concept and making health available for all, assign a special responsibility to the nursing profession. Nursing care has been in existence in the world from the very day the world came into being. Through the ages and with the advancement of medical and scientific technology, the concepts and functions of nursing have undergone vast changes. There is still much scope to make further changes in the role and functions of the nursing personnel in accordance with the needs of the times. Primary care means passing from health system which for almost a century has magnified curative care requiring a high degree of technical skill, super-specialization and scientific knowledge to a system of health care which would give priority to simple basic care, care for maintaining life as well as the aid which will prevent illness from worsening—simple curative measures. In other words, all the physical and mental aptitudes of the beneficiaries of care and their families should be mobilized. This means that doctors and nurses should no longer hold the monopoly of knowledge built over centuries. There is need to reconsider the relationships between professional skills and popular needs. Changes have to be brought about in ideological, sociological, technological areas of educational programmes of all health professionals. The field workers with adequate knowledge of the community have to be initiated into the health care delivery system. Nursing education which, till today, has taken place mostly in the hospitals will have to prepare nurses for primary health care. Nurse educators and nurse administrators must prepare themselves to meet this challenge posed by the needs for primary health care throughout the length and breadth of our country. Nurses should be prepared to work with the people and not for the people only. This would require reorientation in the pattern of nursing education and nursing services.

(Continued on page 219)



WORLD HEALTH DAY—7 APRIL 1983

HEALTH for All by the Year 2000 A.D. is not a slogan but an action programme in which everybody has to play a vital role. Unless each individual becomes health conscious and feels a personal as well as social commitment towards raising his health status, the goal of Health for All would be difficult to achieve; whatever the financial and other resources made available, said Kumari Kumud Ben Joshi, Deputy Minister for Health and Family Welfare.

Kum. Kumud Joshi was inaugurating the World Health Day function organised at the Central Health Education Bureau, New Delhi on 7 April, 1983.

She said that all research and health programmes should be relevant to the Indian conditions. No programme could be successful in isolation from the wider, social and economic conditions. Health and Family Welfare programmes are closely integrated and are a part of social development.

Speaking on the occasion Dr D.B. Bisht, Addl. Director General of Health Services said as far India is concerned health was recognized as a basic human right since Independence. All efforts are being made to translate the objectives of the programme into action and make this programme meaningful and productive.

Dr V.K. Sharma, of W.H.O. said that the progress made by India in the field of health was praiseworthy. W.H.O. is committed to participate in all efforts which help in raising the health status of the people.

Dr B.C. Ghosal, Director, Central Health Education Bureau (CHEB) in his speech informed the audience about the action taken in the field of health education for achieving the goal of Health for All and assured that the efforts will continue.

Earlier Kum. Kumud Joshi inaugurated the exhibition on the theme of the Day which covered the wide spectrum of health problems and the plans to meet the challenge of their problems. The areas covered included immunization, blindness, leprosy, tuberculosis, malaria, safe drinking water, environmental sanitation and food and nutrition. △

THIRTY-SIXTH WORLD HEALTH ASSEMBLY
(continued from page 233)

New policies for health education in primary health care

More than 300 delegates took part in technical discussions on "New policies for health education in primary health care." The Director-General told the participants: "I am personally convinced that primary health care will stand or fall depending on the progress made in health education." It was agreed that new policies in this area must include clear, unequivocal recognition of the need to involve the community actively in health planning. It should also be recognized that health is not strictly a medical issue, but is also environmental, cultural, political, social and economic. Inter-sectoral cooperation is therefore necessary to strengthen health education and self-reliance in all aspects of development.

The delegates also recommended that national policies should give full importance to the coordination of public information and education for health, with education in general recognizing that these must be mutually supportive and that health education in schools at all levels is essential to the future development of primary health care strategies. △

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HEALTH EDUCATION
(continued from page 229)

The main functions assigned to the information media are generally as follows:

- To help create political will by appealing to policy makers;
- To raise general health consciousness and help set norms bearing on health levels;
- To inform decision makers about the latest developments in health sciences and their limitations, and point out relevant experiences that deserve to be publicized;
- To help deliver technical messages in simple terms; and
- To help foster community involvement by reflecting public opinion, encouraging dialogue and facilitating feedback from the community.

Influencing behaviour

The ultimate purpose of health education is to influence the behaviour of individuals, families and communities in maintaining and developing their health. There is therefore a dire need to understand which factors foster or hinder certain types of behaviour, particularly those that promise more healthy outcomes. Furthermore, the values and practices that may have health impacts are deeply imbedded in the social and cultural aspects of life. As these may differ from country to country and even between one town and the next, extrapolating findings from a specific cultural, social or political context into general rules often yields disappointing results. It is important, therefore, to move away from concentrating on specific behaviour patterns and recognize the importance of "life-styles" in the prevention of disease and the promotion of health. It is within the context of life-styles that adherence to certain health practices becomes truly meaningful.

Knowledge is not the sole basis for healthy behaviour, as is evidenced by some doctors who smoke and some educated individuals who over-eat. But it remains true that knowledge is the *sine qua non* of health education.

Health education is therefore the cornerstone of primary health care. Its role is very much wider and more varied than in the past. Its aim must be to help each individual each family and each community to achieve the harmonious development of all their physical, mental and social potential.

Health education specialists, therefore, must meet this challenge and take their due place as major architects of Health for All by the Year 2000.

—W.H.O. Feature

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