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**ORGANIZATION OF
MENTAL HEALTH SERVICES
IN DEVELOPING COUNTRIES**

**Sixteenth Report of the WHO Expert Committee
on Mental Health**

WORLD HEALTH ORGANIZATION

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Geneva, 22-28 October 1974

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ORGANIZATION OF MENTAL HEALTH SERVICES IN DEVELOPING COUNTRIES

Sixteenth Report of the WHO Expert Committee on Mental Health

The WHO Expert Committee on Mental Health met in Geneva from 22 to 28 October 1974 to discuss the organization of mental health services in developing countries. The meeting was opened by Dr T. A. Lambo, Deputy Director-General, on behalf of the Director-General, and he pointed out that effective treatment methods were now available to modify and attenuate a wide range of psychiatric disorders. These treatment methods have as yet been applied only on a very limited scale in developing countries, so that a vast number of cases of treatable but untreated mental illness exists. Furthermore, in many countries, the limited resources devoted to mental health were used in inappropriate and counter-therapeutic ways, for example, in costly, centralized, custodial mental hospitals. It was for this reason that the Expert Committee had been convened to consider the organization of mental health services in developing countries. Dr Lambo reminded the Committee of the constraints under which all health services operate and the importance that is attached by the World Health Organization to the development of basic health services. These factors would be of prime importance in the Committee's deliberations and he called for fresh and innovative approaches to the problems of mental health care.

INTRODUCTION

Mental health is inseparable from general health and community development

Today, in the developing countries, over 40 million men, women, and children are suffering from serious untreated mental disorders. In addressing themselves to this problem the members of the Expert Committee were convinced that the organization of national mental health services could not be considered in isolation from the wider problems of public health, and of social and economic development, that confront the governments of all of

the developing countries. Many of these countries have to contend with the very serious threats to their citizens' wellbeing associated with rapid population growth, crises of food production, internal migration, and accelerated social change. In drawing attention to the high prevalence of mental suffering, for which measures of relief now exist, but have not been made available on the necessary scale, the Committee remains keenly aware of other unmet needs—for food, for pure water supplies, for the eradication of preventable infectious disease, for education, and for an improved basic standard of living.

Mental ill health is responsible for only a part of the suffering endured by the three-quarters of the human race who live in the third world—but it is a most significant part, because of the amount of disability and hardship to which it gives rise in those afflicted, in their families, and in their communities. Until now, it has not been possible to help more than a minute fraction of these sufferers; but now it is possible to do much more, provided certain obstacles can be overcome. This report indicates the ways in which, in the opinion of the Expert Committee, mental health services can be organized so as to make a much greater contribution to general health and social welfare than has ever before been possible.

THE EXTENT, NATURE, AND CONSEQUENCES OF MENTAL HEALTH PROBLEMS IN DEVELOPING COUNTRIES

Well conducted epidemiological studies in several parts of the world have shown no fundamental differences either in the range of mental disorders that occur or in the prevalence of seriously incapacitating mental illness. These studies indicate that such seriously incapacitating mental disorders are likely to affect at least 1% of any population at any one time and at least 10% at some time in their life. In the developing countries, as elsewhere, the major functional psychoses (schizophrenia and affective disorders) constitute a large part of such serious disorders and, in addition, mental disorders secondary to infectious illnesses and other organic pathology are relatively common. About half of the population in many developing countries is under the age of 15 years, and there is a large burden of child and adolescent disorders. The prevalence of psychiatric disorders of old age (especially dementia), which is at present relatively low, is likely to rise as life expectancy increases. The prevalence of some organic brain conditions is likely to fall with the introduction of public health measures but such measures are likely, also, to increase the number of surviving children with

brain damage and resultant mental retardation. The prevalence of brain injury resulting from traffic and other accidents has risen and will probably continue to rise in developing countries. Prevalence rates for epilepsy (idiopathic and symptomatic) are higher in developing countries than in developed countries, where they have been studied, ranging from 0.9–2.1%. There is a wide variation in the rates of dependence on alcohol or other drugs; in most rapidly growing urban communities alcoholism constitutes a serious public health problem and in some rural areas the prevalence is rising.

The extent of other forms of mental disorder (psychoneuroses, emotional disorders, personality problems) is more difficult to define, but there is no evidence to support the view that such disorders are significantly less common in developing countries than elsewhere. Various studies have shown that about one-fifth of patients attending curative services (health centres, outpatient clinics) in developing countries have a significant psychiatric disorder, and even in the general population surveys have shown that the prevalence of these problems may be as high as 10% or even more. Such patients often present with somatic symptoms and may be dealt with inappropriately. They may become frequent attenders at health facilities, occupying a disproportionate amount of the staff's time.

The particular nature of mental disorders in developing countries was considered. In these countries, infections, parasitic infestations, and malnutrition lead to many cases of mental disorder. Certain forms of acute functional psychosis with florid symptoms have been described as common in Africa and elsewhere in developing countries. Lack of treatment facilities leads to the development of particularly severe forms of psychotic illness. In many cases it is these florid examples of mental illness, which constitute only a small fraction of the whole, that command public attention and concern the authorities, rather than the whole range of mental disorders. In depressive illnesses and the psychoneuroses, patients in developing countries frequently present with predominantly somatic symptoms, with the consequences noted above.

In developing countries the populations are predominantly rural (80–85%) but there are also many rapidly growing cities. In rural areas the mentally ill are remote from any psychiatric facility and their illness may lead to loss of efficiency in farming, child care, and other important functions. As a result the children of mentally ill patients in rural areas are frequently malnourished and such patients may never regain their former social efficiency, even after full recovery. In urban areas, the loss of family support increases the dysfunction of the mentally ill. Overcrowding, unemployment, and rapid social change, together with a lack of modern health facilities, combine to make mental disorder a major problem. The

process of development itself produces problems of adjustment and adaptation that should be of general social concern, as well as having important implications for mental health.

It may be concluded that mental disorders constitute a very serious problem in the developing countries: the functional psychoses occur ubiquitously, and serious mental disorders with an organic basis occur more frequently than elsewhere. Nonpsychotic mental illness forms a significant part of the case load in all curative health services. In addition, mental illness may present itself under various guises such as: physical complaints, criminal offences, suicide, frequent or prolonged absenteeism from work, dropping-out from school, etc. While these problems are in themselves serious enough, the suffering on the part of the family and the interference with the socioeconomic functioning of the patient's household, and the community at large, should also be taken into account.

PRESENT RESPONSES TO THESE PROBLEMS

Attitudes to mental disorder

Serious mental disorder is often a source of fear and, in many developing countries, its cause is commonly thought to be supernatural. In some cases this leads to rejection of the mentally ill person and in others to a fatalistic attitude. Patients and their families tend to lack confidence in modern medicine, and mental hospitals are usually seen as custodial institutions in which troublesome and frightening individuals are segregated, rather than as curative in function. Nevertheless, the extended family system is sometimes able to tolerate deviant members relatively well. In rapidly urbanizing societies, however, the number of nuclear families and single-person households increases, with a consequent decrease in the support and tolerance of deviance.

It is important to recognize that such attitudes to mental disorder are common, not only in the general population, but also among administrators, planners, politicians, and even health personnel. These attitudes may not be expressed freely, but they constitute a major obstacle to the development of rational mental health services. Only when such people are able to witness directly the efficacy of modern methods of treatment and the successful reintegration of the mentally ill into society will mental disorder lose its stigma and aura of fear. Even those working in the field of mental health itself may have attitudes favouring institutional care, conditioned as they are by their working environment, which make the introduction of new methods of mental health care difficult.

In the case of nonpsychotic mental disturbances many people prefer to ascribe their illness to physical causes and, because of their insistence, health workers often resort to costly examinations and unrewarding physical treatments.

Traditional treatment ^a

The function of traditional healers in treating mental disorder is controversial. Although the practice of such healers is widespread, there are important differences in the methods employed, the type of person treated, and the social position of healers. It is for this reason that some psychiatrists have been able to collaborate effectively with such healers while others have rejected such methods. Although there can be no uniform approach, the following general points can be made.

(1) Traditional healers frequently have a much wider social function than is indicated by the term "healer": their knowledge and incantations may embody the beliefs and culture of a tribe or village, its folklore, its values, and its legends. They may be in a position greatly to influence attitudes in many important areas, including health care; they act as family counsellors, giving advice on the most propitious times for building a house or marrying, and have both quasi-judicial and religious functions, often acting as an agent between the physical and spiritual worlds, the present and ancestral worlds; their healing activities may include the management of mental illness, a variety of somatic illnesses, and surgical and obstetric problems; and they frequently employ herbal treatments, producing medicaments and trying new ones—such herbal preparations sometimes including potent tranquillizing drugs.

(2) Though some of these healers are able and understanding practitioners, there is no doubt that some are unscrupulous, in both the methods they employ and their mercenary motivations. This applies particularly to some healers who see their clients only briefly and prescribe a single, expensive treatment. Others have been shown to offer effective and humane management of psychotic and epileptic patients, often caring for them over a period of weeks or months, employing a variety of treatment methods and helping eventually to rehabilitate the patient. In many areas such healers offer the only care for the mentally ill, since modern mental health facilities are totally lacking. Patients with neurotic symptoms may also gain relief after seeking the help of such healers.

^a The Committee noted that "healers" in some parts of the world could not strictly be described as "traditional", although their function in society was in some ways similar to traditional healers elsewhere.

(3) Care and attention is also provided to those with mental disorders by some religious groups, where a particular " healer " may not be designated. Healing ceremonies, involving the induction of trance states and other suggestive techniques, are the main therapeutic component.

(4) Close collaboration between traditional healers and psychiatrists is probably appropriate in only a few selected situations. In many other instances, however, those responsible for mental health services may have to recognize the function performed by healers, both therapeutically and in influencing attitude. Some limited form of cooperation between health workers at village level and traditional healers may also prove effective, particularly when such workers are drawn from the village itself and may know and respect the healers. Attempts to suppress or directly oppose the practices of healers could be misplaced, unless there is clear evidence of malpractice.

(5) The attitude of the community towards the traditional healer has also to be considered. People often take a very pragmatic view in that they try to obtain help wherever it is available, whether medical or traditional. Not infrequently they will consult both types of healer to potentiate the effects of one with those of the other.

The Committee thought that some measure of control should be exercised over the practices of traditional healers and considered that possibilities for their education in matters of health should be explored.

Role of general health and welfare services

The general health services in developing countries have been concerned primarily with combating communicable and infectious diseases and malnutrition. Emphasis has been placed on environmental sanitation, clean water supply, mass vaccination and disease eradication campaigns, and the provision of maternal and child health care ; considerable success has been achieved. Many of these problems still remain acute, however, and there has been a conspicuous failure to provide basic health services to more than a minority (10-15%) of the population of developing countries.

The strengthening of basic health services has been identified as a key area for WHO assistance and various alternative strategies that appear promising have been identified. The use of " primary health workers " ^a

^a By this term the committee implied the person sometimes called " village health worker " ; but he may also work in urban areas, such as shanty towns. Such workers are drawn from the community in which they work and have a brief training in the basic principles of public health and health care.

with a brief training and clearly defined responsibilities is one method of improving basic health services. The Committee considered that this is an important area of development and noted that a mental health component has not yet been introduced into basic health services.

There have been several examples of the successful integration of mental health into general hospital services. A wide spectrum of mental disorders, including acute psychotic conditions, can be successfully treated in general hospitals and even in health centres. In some cases this has been achieved by general duty medical officers including care of mental disorders in their responsibilities; in others, psychiatric units have been run primarily by psychiatric nurses with occasional visits from psychiatrists. In some places, outpatient services have been established based on the general hospital or health centre and these cases demonstrate clearly that it is possible to integrate psychiatric services with general health services. These examples are relatively rare, however, and in almost all developing countries mental health services form little or no part of general health services. Health planners and doctors are often unaware of the extent of mental morbidity. This is partly a legacy of medical schools, many of which have not included psychiatry in their curricula until recently. One consequence of this is that patients with a psychiatric disorder who present at health centres and outpatient clinics, and who may be admitted to hospital, are frequently misdiagnosed and managed ineffectively.

The same considerations apply to welfare services. These have been concentrated upon the physically disabled. It has been shown that socially supportive measures for acutely or chronically disturbed patients and their families can favourably influence the course of mental illness, improving the social functioning of patients and decreasing the need for hospital care. Social welfare services in developing countries have not met this need, nor the needs of homeless children, the mentally retarded, young delinquents, and the aged. The requirement for such services is most pressing in urban areas.

Availability of mental health resources

Where any provision for dealing with mental health problems is available in developing countries, it is usually in the form of a mental hospital. In general, such hospitals are large, isolated, serving a wide area and have little contact with the communities served. Patients are usually brought by relatives or the police, often with considerable delays during which patients may be restrained and receive no treatment. The hospitals themselves are poorly staffed and grossly overcrowded. Active treatment is usually limited to physical therapy; rehabilitation and social therapy can rarely be carried

out. Such hospitals become largely custodial and patients become institutionalized, many staying for long periods. Despite the poor standard of care, such hospitals are expensive to run. They reinforce negative attitudes to mental health, both in the public and among health personnel. Well meaning public pressure may lead to improvements in the condition of such hospitals and even to the construction of new hospitals, but the underlying problem of a large institution remote from the people it serves remains. Attempts have been made to use mental hospitals as training centres for staff working in general hospitals and health centres and for mental hospital staff to supervise their subsequent activities. In some cases, these have been successful, but the training experience is not ideal and there are difficulties in releasing mental hospital staff for extra-hospital duties.

In some areas there are no separate provisions for the treatment of the mentally disordered; when socially disruptive they may be confined in prisons.

In all developing countries there are too few trained psychiatric staff to meet mental health needs. (In most developing countries there are less than 1 psychiatrist and 2 psychiatric nurses per 100 000 population, in many there are less than 1 psychiatrist and 1 psychiatric nurse per 1 000 000 population, and in some there are none.) Although some countries have been able to increase the number of psychiatrists and nurses with training in psychiatry, there is no prospect in the next 10-20 years of providing enough specialized personnel to meet even the most basic mental health needs.

Psychotropic drugs are often in short supply and although they are made available in some general hospitals this is not always the case and even mental hospitals may be completely lacking in supplies. There is rarely any definite policy on drug purchase, standards, or distribution and little training is provided on their appropriate and effective use. Paradoxically, expensive minor tranquillizers and hypnotics are often used widely and unnecessarily in general clinics and hospitals.

Sometimes expensive machinery is available but inadequately maintained and utilized. Lack of resources may be complicated by lack of administrators suitably trained in planning and management techniques.

Legal and administrative provisions

Most countries have laws or regulations concerning mental patients. In addition, there may be provisions in the criminal laws of a country for mentally disturbed offenders. Often these legal provisions are outdated and do not cover the rights of psychiatric patients (including the right to

treatment), or the minimal requirements for the institutions in which they may be confined for many years. Such provisions are not of much use anyway if there is no administrative set-up to follow up such regulations and ensure that they are being observed—and where necessary, to apply the sanctions that have also been laid down in the mental health legislation. As a result of cumbersome laws, psychiatrists in short supply may have to spend a considerable proportion of their time in law courts.

In only very few countries is there a representative of mental health professionals in the ministry concerned with health, who could take part in formulating, supervising or updating of mental health laws, or who could introduce mental health in the planning of health services. Most of the time this work is left to *ad hoc* committees, which may or may not include psychiatrists and other mental health professionals.

Economic factors

It is proper that the largest proportion of a national budget for public health has up to now been assigned to the eradication of infectious diseases with a high rate of morbidity and mortality. However, that mental health is usually found near the bottom of the list is not justified and may be partly due to the health planners' lack of awareness of the extent of morbidity and disability caused by mental disorders. Planners rarely take into account the tremendous cost of mental illness. Chronic patients who are unable to care for themselves are often dependent for many years on social support from the community. It has been shown that families with a psychiatric patient in their midst may experience economic deterioration or are kept from developing their full economic potential. The importance of psychological factors in absence from work has been pointed out. Psychological disturbances can be responsible for up to a third of all industrial absenteeism. Although these consequences of mental disorders have not yet been widely assessed in the developing nations, doctors in these countries are already familiar with a similar phenomenon in the civil service, in the armed forces, and among plantation workers. Mental disorders in children frequently lead to poor school performance and to dropping-out of school. This wastes educational resources and seriously impairs the economic and social potential of such children.

APPROACHES TO THE DEVELOPMENT OF MENTAL HEALTH SERVICES

Determination of objectives and priorities

The objectives of mental health programmes should be defined within each country. The overall objectives of the general health services must be taken into account and it would be an advantage to define mental health objectives as part of a general country health programme. There will obviously be differences between and within countries in the demonstrable mental health needs, the available resources, the philosophies behind possible solutions, and the value judgements applied in the selection of objectives and setting of priorities. However, there are certain general principles and criteria which should be taken into account.

(1) Needs should be considered in terms of both the prevalence and the consequences of various mental disorders. The consequences can be assessed from various points of view, for example, social and health consequences, and the impact on welfare and health services. The public should not be passive recipients but should participate actively in planning health services. In this way more active involvement in delivery of care is likely to follow.

(2) In selecting objectives, a major consideration should be whether effective means of modifying the course of a particular mental disorder are available.

(3) The available resources, which will necessarily be limited, must also be taken into account. As well as the resources provided by governments, other potential sources of mental health care should be sought, particularly from the local communities themselves.

(4) The setting of objectives involves planning for the future. Forecasting of future needs and resources is therefore an integral part of planning.

Next, the actual statement of objectives should be in terms of meeting circumscribed health needs, either as measurable health effects or as quantifiable units of service delivery. The time required for their achievement must also be included. It follows that objectives cannot be defined simply in terms of service needs, i.e., posts, buildings, or equipment, nor can they be defined in vague or general statements. Planners should address themselves to each problem, deciding first whether it should be included in a programme, then how it can be put into operational terms so that results can be achieved within a specified period of time. As regards acute psychiatric emergencies, for example, it might be decided that a service providing for their recognition, followed by prompt referral to an appropriate

treatment centre, should be available for 50% of the population in a given area within a period of 5 years. (Clearly, in some circumstances, even this would be an unrealistic target.)

The Committee considered that there are certain conditions, the management of which should in many developing countries be included in a health programme, as follows.

(1) *Acute psychiatric emergencies* (e.g., acute excitement, confusional states, suicidal states, stupor). These are potentially highly disruptive to the family and the community at large. Lack of treatment or inappropriate management can lead to unnecessary harmful sequelae to the individual and his family. Recognition is relatively simple and treatment is usually limited in time and is of clear benefit. The objective should therefore be to provide for recognition at community level and treatment in an appropriate facility. The target set for coverage and the time for its achievement will depend on the resources available, in particular on the stage of development of peripheral health services.

(2) *Severe psychotic disorders* (for example, schizophrenia and affective psychosis). These conditions have deleterious social and economic effects that can be substantially attenuated by appropriate therapy, so that the patient can maintain his or her position within the community. The objective therefore should be to provide supportive and treatment services on an outpatient and domiciliary basis to such patients if they can still be retained in the community, or appropriate residential facilities for homeless chronic mental patients. Again the coverage and timing of the objective must be realistically set, taking into account the supporting and supervisory services that would be necessary, the cost and availability of drugs, and the training requirements.

(3) *Mental retardation, epilepsy, and chronic handicaps* resulting from organic brain disorders. The objectives can be stated as a reduction in the number of such handicapped individuals requiring institutional care and an increase in the number functioning at their optimal level within society.

(4) *Other psychiatric disorders* presenting at general health clinics and hospitals. Failure to recognize such disorders leads to wasteful and time-consuming interventions. Both depression and anxiety are amenable to modern treatment. A simple objective would be to provide for the recognition of a significant proportion of cases and their appropriate management. In some cases this would involve avoiding active intervention, since many such conditions are either self-limiting or will respond to simple supportive measures.

(5) *Psychiatric and emotional problems of high-risk groups*. In different countries, there are likely to be particular subgroups of the population

who are especially prone to psychiatric and emotional disorders, and who may need to be specially catered for. Such groups include homeless children, refugees, patients with chronic physical diseases such as leprosy, and isolated old people. Students as a group merit special attention because they are potentially valuable members of society and emotional illness may lead to the discontinuation of their studies.

Development of strategies to achieve priority objectives

Services in rural areas

The most urgent problem in the development and delivery of all health services is that of adequate coverage of the population. This is particularly so in the rural areas with a widely dispersed population and a paucity of health personnel. Basic mental health care (in the first instance, for psychiatric emergencies and for the support of epileptics and psychotics living in the community) will have to be provided by primary health workers recruited by, and from, the village itself, or by visiting medical assistants and nurses. At this level of services only the simplest of tasks can be included in the work of the primary health worker : recognition of psychiatric emergencies and choosing between the application of a very limited range of drugs and referral to the next level ; supporting and advising the family ; follow up of chronic patients.

Even these simple and circumscribed tasks cannot be performed without the support of consultation and back-up services provided by mental health personnel.

Mental health care at the level of the health centre

The more difficult cases can be referred to this less peripheral and better-equipped level of general services for further assessment and more intensive treatment with psychotropic drugs, particularly if short-term removal from the immediate environment is an essential part of the treatment. Also, at this level, a first step may be taken in the recognition of psychoneurotic and personality problems as the cause of chronic physical complaints and unduly high demands on medical services. This work may be done by general health workers regularly supervised by mental health personnel.

Services in urban areas

The rapidly growing populations of large cities are characterized by their heterogeneity. For example, in many towns there are at least two major

groups of people, (a) the settled, and relatively sophisticated city-dwellers, and (b) those who dwell in shanty towns and city slums. Large numbers of the former are seen in general hospital outpatient clinics presenting with neurotic and psychosomatic disorders. The shanty towns and slums will contain relatively large numbers of chronic psychotics, epileptics, high-grade defectives, and people with personality disorders. Many of these are vagrants who have drifted into the towns, having lost contact with their families ; most of them live by begging, and they tend to shun contact with the health services. It will be necessary for primary health workers and other health personnel to seek them out, and to persuade those who can be helped by psychiatric treatment to accept this treatment on a regular basis. Thus, in planning services for urban areas it is of importance to take into account the demographic and socioeconomic differences between various population groups.

It may be true that the urban situation increases the load of mental illness, although this has not yet been conclusively demonstrated. It is, however, certain that urban, compared with rural, populations show a higher awareness of illness and an increasing demand for medical services. A second condition of the urban situation is the proximity of other more specialized health services. Special consideration may therefore have to be given to the provision of mental health care in the urban areas of the developing countries and this may include the use of mental health personnel based at mental hospitals or psychiatric units in general hospitals, general practitioners where available and possibly new kinds of mental health workers.

Psychiatric units and outpatient facilities in the general hospitals

The regional, provincial, or district general hospital may be the first level at which specialized mental health services are available in the form of a small psychiatric inpatient unit, outpatient facilities and mental health professionals, such as nurses, medical assistants and social workers with practical training in psychiatry. In other hospitals provision for the admission and treatment of patients with psychiatric illness should be made in the medical wards. It is at this level that the psychiatrist should be based or should at least be a regular visitor. Adequate supporting services, such as transportation, should be made available.

In addition to their therapeutic tasks, mental health workers in the regional general hospital should be very much involved in supporting, supervising, and receiving referrals from workers at a more peripheral level. They should engage in programmes of mental health education both directly and through other health workers.

Adaptation of existing mental health services

In a number of countries mental hospitals could contribute usefully to the development of services for the future, but only after adaptation. Their staff should not only work within the hospital but should also be involved in community-based treatment facilities. The hospital itself should be subdivided into smaller functional units, each, for example, dealing with patients from defined catchment areas and within these units there should be separate facilities for treatment of acute and of chronic patients. Once they have been reorganized in this way, mental hospitals can also provide part of the clinical in-service training required by mental health personnel employed in the periphery and by general health personnel. The hospital staff should also have a supervisory role and provide support for peripheral workers.

Cooperation with general health services

It will be necessary to enlist the agreement and support of administrators and of leading professionals in the general health services in order to facilitate (a) the involvement of the personnel of these services in the delivery of basic mental health care, and (b) the establishment of outpatient and inpatient psychiatric services in clinics and hospitals of the general health services. This will be achieved more readily if the status of mental health professionals is raised (see later).

Mental health planning in the ministry concerned with health

Psychiatrists and other mental health workers cannot expect to realize their plans for improving mental health services unless these plans are recognized as valid by their governments, and given financial and administrative support. It is, however, only very seldom that medical or lay administrators in national ministries of health are either well informed about mental health problems or motivated to do anything about them. In order to ensure that action is taken to deal with these problems, there must, within each country's health ministry, be a unit especially concerned with mental health service planning and administration.

Availability and cost of drugs

The new psychotropic drugs play a very important part in the delivery of improved mental health care : but their cost is high and increasing, and in many areas the supply of these drugs remains irregular or inadequate. It will be advisable, in planning for wider population coverage, to concentrate on the use of a limited range of these drugs and to ensure their being made available at a cost which the individual patient (or the state-financed

health service) can afford. To put these policies into effect will require action by each country's health administration, supported by mental health professionals. Where agencies controlling importation and manufacture of drugs exist, the advice of psychiatrists should be sought. The use of nonproprietary drugs, bulk purchase and local manufacture are other possible ways to reduce costs. In addition, steps must be taken to limit inappropriate use of drugs. There is scope for further international study of this problem.

Mental health legislation

Mental health workers have a responsibility to arouse public opinion so that outmoded mental health legislation is suitably amended. It is of outstanding importance to ensure that patients have a right to treatment. This does not imply that a mentally disturbed person should be expected to be "cured" before discharge, as stated in some legislation. Admission and discharge procedures should be simplified and include provisions for voluntary admission. Mental health legislation should serve to protect the patient as well as the community, the doctor carrying on his profession, and the mentally disturbed offender before the courts.

Contribution of nonmedical agencies

It is clear that while measures taken within the health service may improve and extend mental health services, the needs cannot be fully met in this way. Communities should be made aware of this so that unrealistic expectations are not aroused. Community leaders and councils should be encouraged not only to identify and express the mental health needs of their people, but to seek ways by which these needs can be met from local resources or with minimal assistance. This approach should be encouraged by mental health professionals and other health workers in their contacts with community agencies, so that a dialogue may be established in which the community can express its needs, and the professional gives information on services available, provides mental health education, and stimulates local response. In this dialogue, neither the professional nor the local representatives assume a passive role and both should respond by appropriate developments and modifications.

Teachers, the police (and other law enforcement bodies), magistrates, religious leaders, local council workers, community development workers, and others are among the more socially active members of most communities, even where health services do not exist. Many of their functions are highly relevant to mental health, for example, in their dealings with deviants of various kinds, with disturbed and delinquent children, with family crises,

and with bereaved and other distressed and maladapted individuals. Their responses in crisis situations and to the long-term problems posed by deviant and inadequate individuals may contribute positively (or negatively) to the overall mental health of the community and to personal adjustment. They can also facilitate and improve the care of the chronically mentally ill within the community. These contributions should be recognized, enhanced, and made as positive as possible. The psychosocial element in the training of such workers should be strengthened. A forum in which psychosocial problems and their impact is freely discussed by such non-medical workers is likely to be valuable in increasing their sensitivity to, and contributions to, mental health problems. Health workers might be directly involved in such a forum or involved in its early stages, but there is no reason why it should not meet regularly and independently. It would be important to evaluate the results of such an initiative in terms of the attitudes and response of nonmedical agencies to mental health problems. There is also scope for developing the mental health contribution of various lay associations and organizations in the community, such as trade unions, religious bodies, and self-help committees and such an approach could be followed in other situations, such as the civil service, universities, factories, plantations, and prisons.

Development of pilot projects in community mental health care

Countries should, in the first instance, carry out one or more pilot programmes (possibly involving universities) to test the practicability of including basic mental health care in an already established programme of health care in a defined rural or urban population. Such programmes might serve to carry out studies on the prevalence, incidence, and natural history of mental disorder in the community ; to create an awareness in the community that mental illness can and should be treated without having to isolate and segregate patients ; to persuade officials and public health personnel that they have a responsibility to deal with mental disorder in the community, where it must be managed as a health problem ; and to provide an opportunity for the training of auxiliary medical, public health, and mental health workers. Such pilot programmes should be accompanied by systematic documentation of the work done, for purposes of evaluation.

MANPOWER : ROLE AND TRAINING

The most important constraint in meeting mental health needs in the developing countries is the extreme scarcity of mental health professionals. This situation is unlikely to improve within the next decades, because of

the small numbers at present being trained in mental health care, and the migration of those who have completed their training to developed nations. Even the stated rates of mental health professionals available per 100 000 population, low as they are, give much too favourable a picture, as the majority of them are concentrated in urban areas. In consequence, the rural masses of the population experience very little benefit from their services.

As indicated on page 18, the development of basic health services at village level, with a supportive structure of health centres, district hospitals, and more central specialist facilities, offers the opportunity to provide mental health services on a limited scale. The Committee recognized that this approach called for fresh consideration of the role and training both of general health workers and of mental health professionals.

There should be a mental health component in the training of all health workers. This must be designed carefully for each kind of worker in relation to their educational level, the time available for training, and the tasks they will be expected to perform. There must be provision for regular additional training. Mental health professionals should be engaged in training, supporting, and supervising other health workers. It should be noted that such supervision should not be carried out in a wholly critical manner (a monthly visit followed by a critical report is unproductive) but in a spirit of service—the mental health professional (psychiatric nurse or psychiatrist) should respond to the needs as expressed by those they supervise. Any direct therapeutic activities undertaken by mental health professionals should wherever possible be carried out in a training situation and should be directed at particular tasks, for example, the management of the more seriously ill or the psychiatric problems in urban areas, where there may be concentrations of deviants and seriously mentally ill individuals. The possibility of using new types of mental health worker was considered and, although problems of career structure and training facilities would have to be overcome, this possibility was judged worthy of trial in selected areas.

As a preliminary step in estimating the training and manpower requirements it is important to list clearly the tasks to be performed in dealing with mental health problems. These should be stated simply and in terms that allow training programmes and manuals to be designed. This approach applies to both general health workers with some mental health skills and mental health workers of all kinds. For example, in the work of a health worker at primary level, the tasks relevant to mental health can be considered under several headings :

(a) Recognition of signs of mental disorder (including acute anxiety and confusion).

(b) Investigation of the situation at hand (through talking to the patient and his relatives and observing his behaviour).

(c) Action (including listening sympathetically, coping with aggressive behaviour and referring serious problems to the appropriate centre).

(d) Education (seeking greater tolerance towards the mentally ill).

The same approach can be applied to other kinds of workers and in this way new roles can be defined for nurses, psychiatrists, other doctors, psychologists, and social workers. At the same time it is important to bear in mind the job satisfaction, self-esteem, and career opportunities of all such workers, particularly when new kinds of posts are created. Rapid turnover of staff, lack of interest in further training, and, in the case of more highly trained staff, departure overseas are all signs that indicate the need for improved working conditions and status.

The administrative needs at the various levels of the mental health service require appropriate training for the administrators and clear assignment of responsibilities. District administrators should be appointed in addition to those at the central planning department (see p. 20). They would be responsible for assessing the mental health needs and resources in a defined area and for planning gradual improvement in population coverage as regards mental health care. If sufficient psychiatrists are available they should undertake this task, for which they would need extra training. If psychiatrists are not available, experienced psychiatric or general nurses or medical assistants could take administrative responsibility; they would also need special training. A multidisciplinary training programme in mental health administration at national or regional level could provide such training.

Implications for training

Primary health workers

Modestly trained primary health workers, selected from the communities they serve, are being employed in several countries. As indicated above it may be possible to include a mental health component in their training, and this possibility should be actively pursued. Where training programmes and manuals already exist, they should be modified to allow mental health tasks to be included on a trial basis and the results evaluated. Adequate supervision, support, and referral channels would have to be provided.

General physicians, medical assistants, and nurses

Some mental health tasks should be performed by all such workers, and appropriate training, both in their initial training and in the form of re-

fresher courses, should be provided. Direct contact with the work of psychiatrists and psychiatric nurses (e.g., in psychiatric units of general hospitals) would be most valuable. Manuals dealing with mental health tasks should be available for the training of medical assistants, nurses, and others.

Psychiatric nurses

Nurses with special skills in psychiatry will have an important role in training and supervising other general health workers. Their own training should include methods of teaching and management. Psychiatric nurses should also spend a significant proportion of their time in the outpatient department and should be trained to work closely with the families of patients in the community. There is particular value in posting psychiatric nurses to general hospitals and health centres. They should have an opportunity to intervene directly with individuals, families and groups of patients, be able to function with relatively little supervision, and be able to prescribe a limited range of psychotropic drugs. Training in public health nursing should also be included.

Some psychiatric nurses in developing countries have acquired a high degree of skill in leadership and management. Where available, such skills should be fully utilized, not only in the field of nursing itself but in the health service as a whole.

Psychiatrists

As in the case of the nurse, the psychiatrist should devote a considerable proportion of his time to training other health workers, and to advising and supervising them in their work. He should also be actively involved in planning, managing, and evaluating the service for which he is responsible. These tasks require appropriate training and, in the case of psychiatrists already trained, attendance at workshops, seminars, and short courses would help to improve these skills. In countries where more than one psychiatrist is available, each should be responsible for a defined geographical area. Clinical work should form a significant part of all psychiatrists' work and should, wherever possible, be carried out in a training situation and be directed towards the more complex and difficult psychiatric problems.

The practice of training psychiatrists in centres in developed countries should be reconsidered. At least part of their training should take place in the developing country itself or in regional training centres, where they can be in touch with the responsibilities and tasks involved in their future work. This change might help to limit the loss of psychiatrists through emigration to developed countries. More appropriate training, together with a more

effective role, is likely to increase job satisfaction. In addition, the status of psychiatrists within the medical profession needs to be increased. Opportunities and training for research should be available and would be enhanced by establishing research centres with high standards at national or regional level and by offering training in research methods of various kinds.

Psychologists

There are currently very few clinical psychologists in developing countries and their role has not yet been clearly defined. Their contribution to teaching would be particularly valuable not only for health workers but for teachers, police, religious leaders, and others (see p. 21) and they should also undertake research.

Role of mental health workers in research

As indicated above, research opportunities should be available for psychiatrists and psychologists as this plays a valuable part in training.

Research on service delivery (possibly involving the use of pilot areas and trial schemes), on training methods, and on drug efficacy should lead to concrete improvements in mental health care and should thus receive priority, while research on the course and outcome (and their predictors) of mental disorders and on their prevalence (for example in clinic populations) can provide baseline data for operational research and contribute to planning. Research instruments suitable for developing countries (for case detection, assessment of social functioning, etc.) are urgently required. They are more likely to be appropriate to their needs if they are prepared and tested locally.

Education of the public

Some indication of ways in which community resources could be used for mental health promotion has been given on p. 21. Health education campaigns to change public attitudes to mental illness are unlikely to be successful in the absence of adequate treatment services. Education should be concentrated on key people—community leaders, politicians, teachers, and members of families with mentally ill members. Such education is best carried out by direct contact between health workers and these key people.

MONITORING, EVALUATION, AND READJUSTMENT OF PROGRAMMES

Information collection and analysis

In order to achieve improvements in mental health, specific information is required on available resources and services, and continuous evaluation^a should be built into all new activities. An indication is required of the proportion of persons in need of mental health care that are actually receiving it. Where resources are limited, it is also important to know whether the most urgent and disabling conditions are being given priority attention and whether the available services are adequately distributed.

Large-scale epidemiological surveys of the prevalence of mental disorders are complicated and expensive to carry out and can be undertaken only infrequently in developing countries. Research already reported has provided evidence of the rates of the severe mental disorders already mentioned.

Where it is possible to perform studies in geographically defined areas, or on the patients seen at a particular clinic, the data may be valuable as a baseline for further research on mental health services, for convincing public health and other authorities of the extent of need for mental health services, and for defining the needs of particular groups more clearly. Examples of surveys carried out in developing countries are indicated in the table in Annex 1.

Information is then required on the resources available to meet these needs, including manpower, training facilities, and material resources such as drugs, equipment, buildings, transport, and finance.

The next stage is to monitor what the existing mental health services are actually doing and this will entail establishing a mental health information system. Before developing such a system, it is important to decide what information should be collected and for what purposes. This decision should be reached jointly by mental health administrators, practitioners, and statisticians. There are three main purposes for data collection: to facilitate administration and management of a service or services; for research (operational or other); and to inform the public and/or officials about the extent and nature of mental health problems in order to improve attitudes and facilitate acquisition of funds, community support, etc.

A number of practical questions will then have to be answered: Can the necessary data be collected? Are the existing services capable of collecting such data or will new provisions have to be made? Who is

^a By evaluation is meant an assessment of the achievement of the stated objectives of a programme, its adequacy, its efficiency, and its acceptance by all parties involved.

available to collect data ? Is additional training required ? Data collection is facilitated by simplification of **data sheets**, reduction of the number of items collected, and employment of additional staff where needed.

If the information obtained is to be taken into consideration by decision makers, it must be published and distributed promptly and presented in a simple, readily comprehensible way, with as little unnecessary information as possible. Consultation between statisticians and the users of statistics is helpful at this stage, as well as during planning of data collection.

In any data collection system there is a need for simple and unequivocal definitions of items on which information is to be gathered and for standardization of the methods used for data collection and presentation. Training is also needed for statisticians in mental health, for mental health professionals in the use of statistics, and for clerks. For the collection of useful statistics it is necessary to develop and test the appropriate tools, such as classifications applicable at different levels of data collection. There should be separate budgetary provision for the establishment and maintenance of a data collection system. Work should be carried out on such systems to increase their relevance to developing countries.

Operational research

This is another method of evaluation in which the research is conducted during the progress of an activity with the aim of providing a rational basis for planning. The mental health programme is analysed and a variable is introduced to bring about a desired change. The consequences are noted in order to see whether the desired change has been effected ; if not, another variable may be introduced and its consequences monitored in turn. This procedure would continue until the desired result has been obtained.

For example, the objective may be to treat psychotic patients on an outpatient basis with psychotropic drugs. Unfortunately, such treatment is effective only if the drug is taken regularly for a long period of time. Most clinicians are familiar with the notoriously high drop-out rate of those patients who are most in need of treatment. In this case, as a first step, the drop-out rate of a particular clinic is established as a baseline. Next, the variable of a treatment card (i.e., a card with simple instructions on medication and clinic attendance, carried by the patient) or of more frequent attendance is introduced, and again the drop-out rate is measured to see if this method is more effective. Next, another measure, such as holding a relative responsible for administering the drug, is introduced. Following this the drop-out rate is again determined to detect any change. Finally, domiciliary visits may be introduced and observations made to see whether this procedure further lowers the drop-out rate.

Another example would be to carry out a comparison of the relative effectiveness and cost of two different models of mental health care, one in which this care is provided at a **central point**, such as the primary health centre or the district hospital, to which the patients come from their villages to receive regular treatment, and another in which primary health workers visit the patients' villages and provide regular follow-up in the village itself.

The findings of such studies can have immediate practical application. The Committee welcomed proposals for increased emphasis on operational research that has a bearing on similar practical day-to-day problems of mental health care. A need for larger-scale evaluation studies in defined geographical areas, in which a series of changes in mental health care would be introduced and assessed, was also recognized. Such studies would best be carried out on an international collaborative basis.

REGIONAL AND INTERNATIONAL ACTIVITIES FOR DEVELOPMENT OF MENTAL HEALTH PROGRAMMES

WHO and other governmental and nongovernmental organizations such as the World Federation for Mental Health, the World Psychiatric Association, the International Association for Child Psychiatry and Allied Professions, and regional organizations of mental health professionals have made significant contributions to international collaboration in the field of mental health. Such collaboration is of prime importance for mental health professionals in developing countries. At present, they rarely have an opportunity to sit back and review critically what they are doing. Nor do they have enough possibilities to **compare** and discuss their problems and achievements in relation to an eventual reorientation of tasks because of their heavy workload ; the absence of colleagues with whom to discuss their work ; the lack of reference materials, for example, journals and books ; and the limited travel budget at their disposal.

International organizations could improve communication by organizing seminars or meetings and by taking steps to ensure wide distribution of their publications. Governments may also contribute to these efforts by arranging for the translation of documents concerning mental health services into the local languages. Public health budgets should provide for subscriptions to relevant publications to enable the mental health professional to keep abreast with developments in other countries. Reviews of developments in the field of organization of mental health services in the

world could be prepared by WHO and distributed to Member States or published in one of the WHO series of publications. Such reviews should also include information about projects that have failed, in order to avoid the same mistakes being repeated. An inventory of trial projects concerned with the different aspects of delivery of health services would also be valuable.

Training programmes also require collaboration. The need for detailed analysis of the tasks involved in the delivery of adequate mental health care and for the production of simple manuals and training programmes for the training of mental health workers has been discussed in the section devoted to the role and training of manpower (pp. 22-26). In view of the innovative nature of these undertakings and the need to assess applicability of the training schemes in different settings, WHO should consider the possibility of carrying out coordinated or collaborative trials of such programmes in several countries.

The expertise necessary to instruct mental health professionals in the new roles described in pp. 22-26 will not always be available in a single country. International collaboration may be necessary to teach topics such as health service management, operational planning, teaching methods, and educational technology. Such collaboration may take the form of individual visits to centres outside the country or of group training. Formal training courses may need an institutional base and regional or interregional training centres can serve a useful role in this respect. National, regional, and interregional seminars could also be organized by such centres. These seminars could deal with such topics as the contribution of primary health workers to the delivery of mental health; pilot projects for the delivery of community mental health care; the role of psychiatrists and psychiatric nurses in the supervision of other workers; mental health administration; data collection and analysis; and mental health legislation. International assistance would be helpful in providing audiovisual and other educational aids.

The research necessary to improve the delivery of mental health care could benefit greatly from international collaboration. Such collaborative research should include operational studies on mental health care carried out in pilot areas in several countries. The development of standardized methods for case detection and assessment of social function would make an important contribution to such research, and the development of such methods should be included in the programme for the standardization of psychiatric diagnosis and terminology, classification, and mental health statistics.

SUMMARY AND RECOMMENDATIONS

RECOMMENDATION 1. Governments are urged to recognize mental disorders as problems of high priority for the individual, for the community, and for national development.

In every developing country, health planners are compelled to assign priorities to the numerous threats to public health. In times of famine, severe malnutrition or dangerous epidemics, these particular problems are rightly accorded first priority. In the ordinary course of events, however, there are many competing claims upon health care resources. This Committee believes that the needs for mental health care should not be regarded as separate from, but as an integral part of, the general health needs of every community.

Mental disorders are one of the most important health problems in both developing and developed countries. There are at least 40 million people in the world suffering from serious mental disorders that are not treated. More than 90% of the population of the developing world receives practically no mental health care.

Studies show that mental disorders cause severe disablement and incapacity in at least 10% of every population at some period in their lives. Such disorders include, for example, schizophrenia, affective psychoses, and organic brain syndromes. Much higher rates are found if other conditions are included such as neurosis, epilepsy, mental retardation, and dependence on alcohol and other drugs, for some of which there are indications that the extent and severity tend to increase at times of rapid social and industrial change, as is occurring in many developing countries at the present time. In addition, patients attending health centres and general clinics and in hospitals frequently have mental health problems, either in the form of psychiatric disorders presenting with somatic symptoms or as psychiatric problems associated with physical disorders.

The aims of all health services should be to reduce and limit the distress, dysfunction and harmful social effects of mental disorders and to allow as large a proportion as possible of those with chronic mental disorders to live in the community and contribute usefully. An important contribution to the prevention of certain mental disorders is made by general public health measures and effective means of treatment are now available to modify and attenuate a wide range of psychiatric disorders.

RECOMMENDATION 2. The Committee urges governments to develop means of implementing the available knowledge concerning effective methods of prevention, treatment, and rehabilitation.

RECOMMENDATION 3. The Committee recommends that for conditions for which relief measures are available, high priority should be given as follows :

(a) Psychiatric emergencies : (for example, acute excitement, confusion, and stupor) their recognition, immediate management, and appropriate treatment.

(b) Other severe or chronic psychiatric disorders : the care, as far as possible, in the community of patients with chronic functional psychoses, mental retardation, epilepsy and brain damage following organic brain disease.

(c) Mental health problems of patients attending health centres, general clinics and other curative services : recognition and appropriate management.

(d) Psychiatric and emotional problems of high risk groups : the definition of these will vary from country to country—they may include such groups as the uprooted, homeless children, students, and old people.

Such provision should be for as large a proportion of the population as is feasible. The Committee drew attention to the fact that in many developing countries 50% of the population is under the age of 15 and that in many cases there is no provision to meet the mental health needs of this age group.

RECOMMENDATION 4. The Committee recommends that mental health objectives should be defined in each country taking into account the nature, extent, and consequences of mental disorders and the resources available. The objectives should be realistic and should be formulated in terms of health effect or service delivery to be achieved for a stated proportion of the population in a defined area within a stated time.

RECOMMENDATION 5. To achieve these objectives, the Committee recommends decentralization of mental health services, integration of mental health services with the general health service, and the development of collaboration with nonmedical community agencies.

Decentralization of mental health services implies that mental health care should be made available at the community, district, and regional levels through psychiatric inpatient and outpatient units linked to the general medical facilities. The creation of large mental hospitals should be discouraged and where they already exist the prime consideration should be to ensure that the staff/patient ratio allows adequate treatment, care, and rehabilitation. They should be supported by a network of other services as described in this report.

Integration of mental health care into the general health service means that the mental health component should be incorporated into the work of the primary health worker, the community health centre, district and regional health centres, and hospitals.

Collaboration with nonmedical community agencies means that the contribution of community agents such as religious leaders, teachers, development workers, the police, and the various associations should be sought and that mental health professionals should devote part of their time to the mental health education of such workers in the community in order to make such a broad approach possible.

RECOMMENDATION 6. The Committee recommends that each country should formulate a national policy on mental health, in which the contributions of health, education, and welfare services should be specified and coordinated. Mental health professionals, together with experts from other fields (public health, education, economics, and the social sciences) and representatives of the public should take part in deciding this policy and in its regular review.

RECOMMENDATION 7. The Committee also recommends the establishment of a mental health department or unit within each country's national or regional health administration, whose responsibilities would be the planning and administration of mental health services to implement the national policy and would also include public education on mental health and the collection, analysis, and publication of mental health statistics. Such a unit can perform its functions only if the mental health programme is adequately financed.

RECOMMENDATION 8. The Committee recommends that governments make adequate financial provision for the following programme :

- (a) recruitment, training, and employment of personnel ;
- (b) adequate provision of drugs ;
- (c) a network of facilities, including transport ;
- (d) data collection and research.

In the developing countries, trained mental health professionals are very scarce indeed—often they number less than one per million of the population. Clearly, if basic mental health care is to be brought within reach of the mass of the population, this will have to be done by nonspecialized health workers—at all levels, from the primary health worker to the nurse or doctor—working in collaboration with, and supported by, more specialized personnel. This will require changes in the roles and training of both general health workers and mental health professionals.

RECOMMENDATION 9. The Committee recommends that all health workers should undertake certain tasks of basic mental health care as part of their normal work.

This can be done, however, only if they are given instruction in these tasks as part of their training, and if they are regularly supervised and given support by specialized mental health workers.

RECOMMENDATION 10. The Committee recommends that specialized mental health workers should devote only a part of their working hours to the clinical care of patients ; the greater part of their time should be spent in training and supervising nonspecialized health workers, who will provide basic mental health care in the community.

This will entail significant changes in the role and training of the mental health professionals.

RECOMMENDATION 11. The Committee therefore recommends that the training of mental health professionals should include instruction and supervised experience in this new task of training and supporting non-specialized health workers.

There will also be a need to provide training in mental health service administration for personnel drawn from the various disciplines involved in these services. In the view of the Committee, there is still, and will remain for some years, a pressing need for the recruitment and training of additional mental health professionals to carry out these new roles.

RECOMMENDATION 12. Recognizing the disadvantages associated with relying on the developed countries for the training of mental health specialists, the Committee strongly recommends that training for mental health professionals should take place in their own countries or, failing this, in their own culture area.

Treatment with drugs is an important element in mental health care. The cost of psychotropic drugs is high and increasing, they are inadequately, available, and used inappropriately. A limited range of drugs should be available for use in specified situations laid down by the Ministry of Health. Where there are bodies concerned with the control of drug importation, manufacture, and distribution, they should seek advice from mental health professionals. Drug usage should be regularly reviewed so that inappropriate usage can be limited. The use of nonproprietary compounds, bulk purchase, and local manufacture should be considered in each country, with the object of reducing costs.

RECOMMENDATION 13. The Committee therefore recommends that steps should be taken to reduce the cost of drugs, to make them more readily available, and to ensure that they are correctly used.

The development of mental health programmes can be promoted by adequate legislation: in many countries such legislation is either out of date or non-existent.

RECOMMENDATION 14. The Committee therefore recommends that countries should review their mental health legislation and enact new legislation where necessary. The effectiveness and consequences of legislation, which should include the right of voluntary admission and discharge, should be continuously assessed.

RECOMMENDATION 15. The Committee recommends that basic statistics should be collected on mortality and morbidity from mental disorders, the distribution and availability of personnel, the utilization of facilities, and the dispensing of drugs, in order to evaluate the progress of mental health programmes.

Research on service delivery, training methods, and drug efficacy is essential for improvement in mental health care while research on the course and outcome of mental disorders and their prevalence (for example in general outpatient populations) can provide baseline data for planning. Instruments suitable for research in developing countries (e.g., for case detection and assessment of social functioning) are urgently needed and would be most appropriately prepared in such countries.

RECOMMENDATION 16. The Committee therefore recommends the establishment of research centres at national or regional level with high standards. Such centres should offer training in research methods of various kinds.

The Committee noted the important role that WHO has played in the exchange of information between countries, in the coordination, stimulation, and sponsoring of international activities, and in the provision of advice and assistance to Member States.

RECOMMENDATION 17. The Committee therefore recommends that WHO, in collaboration with appropriate agencies, should continue and if possible extend its activities to cover the following areas:

(a) Research: studies of alternative approaches to mental health care delivery should be carried out in several countries.

(b) Task analysis and development of training schemes: a detailed analysis should be carried out of the tasks involved in the delivery of adequate mental health care. Training programmes, including a simple manual, for the training of health workers to perform these tasks should be devised and evaluated.

(c) The standardization of diagnosis and of other components of mental health statistics (including methods for use in evaluation studies) : work in this area should be continued and extended since it facilitates research and international comparative studies into mental health services. Methods for assessment of social function and for case detection would be particularly valuable.

(d) Establishment of criteria and guidelines for the appropriate use of psychotropic drugs : the Committee considered that international collaboration was necessary.

(e) Mental health legislation : the review of such legislation would be facilitated by an international study and the publication of guidelines.

(f) The organization of seminars and workshops and the distribution of publications on mental health : such assistance is particularly valuable in developing countries where mental health professionals may be relatively isolated and sources of information inadequate. The exchange of information on the results of research in different countries would be beneficial and would prevent unnecessary duplication and facilitate collaborative research.

(g) Assistance in mental health programmes : training, research, and exchange of information should be supported. Regional activities could be made more effective if the staff of each WHO Regional Office could include a regional adviser in mental health.

CONCLUSION

In this report, the Expert Committee, many of whose members were drawn from developing countries, has indicated what steps should be taken to bring presently available methods for the relief of mental disabilities to the mass of the population in such countries. A number of innovations have been recommended, notably the sharing of mental tasks by a wide range of health workers and by other community agencies. In so doing, the Committee kept in mind the realities of the situation with regard to other priorities and available resources in these countries. The members of the Committee considered that an expanded and well planned investment of effort in mental health was now called for within national health and welfare programmes. Such an investment would relieve the personal distress of many millions of the mentally ill and their families and would also make a positive contribution to the social and economic development of the communities in which they live.

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SURVEYS ON PREVALENCE OF MENTAL DISORDERS IN DEVELOPING COUNTRIES

Region	Country	Reference	Population and date studied	All mental disorders	Rate per 1000 population			Remarks
					Psychoses	Epi- lepsy	Mental retardation	
				All	Schi- zo- phre- nia			
Africa	Ghana	Field (1958)	4283 in Ashanti villages (1956-57)		10.00		"Chronic schizophrenia" only	
	Nigeria	Leighton et al. (1963)	Yoruba villages and town. Sample: 326 (1961)	230.00 * 160.00 **	10.00	20.00	* "clear psychiatric disorder" ** "with significant impairment"	
	Nigeria	Mbanefo (1971)	1460 new cases seen by GP in three months	150.00			Equal to number of malaria cases	
	Senegal	Beiser (1972)	65 villages: 35 000 (1970)	100.00 (adults)			"Illnesses of the spirit" known to Sérér	
	Senegal	University of Dakar (1972)	65 villages: 235 (1970)		10 m. 30 f. 0 m. 10 f.	20 male 10 female 0 male 20 female	Rural Urban	
Americas	Argentina	Tarnopolsky et al. (1970)	Three zones of Buenos Aires: 500 000 sample: 1046 (1969)	179.70	9.50	11.50	14.70	
	Chile	Horwitz et al. (1958)	Santiago (1957-58)	190.00	7.00	20.00	12.00	
	Chile	Moya et al. (1969)	N. Santiago (1965-66)	119.00	4.00	9.00	11.00	

Chile	Marconi & Muñoz (1970)	Santiago sample: 2705 (1967-69)	3.00	11.00	12.00	
Colombia	Leon & Climent (1970)	Semi-rural area of 15,000. Sample: 184 aged 20-40 years (1967)	23.30	10.20	29.10	
Americas (continued)	Costa Rica	Adis Castro et al. (1970)	25.00	22.00		
		Nationwide survey: aged over 18 years. Samples: 646 rural; 100 urban (1966-67)	60.00	20.00		
Peru	Mariategui (1970)	District of Lima sample: 2901 (date ?)	187.50	14.10	13.80	
Ethiopia	Giel & van Lulijk (1969)	Village (1967)	91.00			Conspicuous mental morbidity
		Outpatients, general hospital, Addis Ababa	185.00			Compared with 95 for infectious diseases
Iran	Bash & Bash-Liechti (1973)	Catchment area: 3200 (1967)	148.00			Annual consulting rate (including local healers)
Eastern Mediterranean		Rural areas: 505 (1963)	99.00 (12) *			* Those defined as "severe disorders".
		482 (1965)	149.00 (11) *		14-20	
		Urban areas: 930 (1969-70)	166.00 (12) *			
Sudan	Baasher (1961)	Village: 1860 (1960-61)	62.90 **	7.00	4.00	** "such a degree as to be socially noticeable or interfering with work"
Sudan	Baasher (1972)	Rural areas, children (1968)	100.00			Pronounced psychiatric symptoms (estimated rate)
South-East Asia	Sri Lanka	4 villages:				
	Jayasundera (1969)	2506 (1960)	10.00	8.40	5.20	The first two surveys were considered more reliable
		2212 (1961)	5.00	4.50	2.20	
		1519 (1962)	6.00	6.00	1.30	
	India	Dube (1970)	4.00	3.20	3.20	Life-time prevalence
		Rural, semi-rural, and urban areas, Agra region: 29 468	28.79	4.28	2.17	Active cases (18-month prevalence)
			17.99	2.64	1.49	

SURVEYS ON PREVALENCE OF MENTAL DISORDERS IN DEVELOPING COUNTRIES (continued)

Region	Country	Reference	Population and date studied	Rate per 1000 population					Remarks
				All mental disorders	Psychoses			Mental retardation	
					All	Schizophrenia	Epilepsy		
Western Pacific	Korea	Yoo (1961)	Six rural communities: 11,974 (1956-60)	13.80	7.70				
	Taiwan	Lin et al. (1969)	Three communities (rural, small town, city):	9.50	3.90	2.20		3.40	
			19 931 (1946-48)	17.20	3.10	1.40		4.90	
			29 184 (1961-63)						

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