A STUDY OF THE PUBLIC HEALTH APPROACH TO MENTAL HEALTH IN THE WESTERN PACIFIC REGION WITH SPECIFIC REFERENCE TO DEVELOPING COUNTRIES

WHO西太平洋地域－とりわけ発展途上国－における公衆衛生としての精神医療の展開に関する研究

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A STUDY OF THE PUBLIC HEALTH APPROACH TO MENTAL HEALTH IN THE WESTERN PACIFIC REGION WITH SPECIFIC REFERENCE TO DEVELOPING COUNTRIES

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1. INTRODUCTION

1.1 WHO mental health programmes

In its Constitution adopted in 1946, WHO defines health as a state of physical, mental and social well-being and not merely the lack of diseases and infirmities.(1) On the basis of this definition of health, WHO is mandated to develop programmes on mental health in collaboration with Member States.

In the past, WHO's efforts have been focused mainly on the prevention and control of communicable diseases such as malaria, schistosomiasis, diarrhea diseases, tuberculosis and leprosy.(2) The eradication of smallpox from the world is a famous example of WHO's achievement. In the Western Pacific Region, the eradication or total control of poliomyelitis has been set as a possible goal by the year 1995.

However, with rapid socioeconomic and cultural changes, diseases related to lifestyle and chronic debilitating diseases such as mental and neurological disorders have become a major health and social concern in developing as well as developed countries.(3)

Reflecting the changing needs and priorities in health of the Member States, WHO as the guiding and coordinating international agency in the health field, has acquired additional tasks. The narrow concept of public health, dealing solely with the prevention of communicable diseases has been broadened to include the promotion of a healthy lifestyle and the prevention of chronic disabilities.

The mental health programme of WHO has a wide scope which is characterized by public health approach.(4)(5) At present, it covers three major activities:

- the promotion of psychosocial and behavioural aspects of health in human development;
- the prevention and control of alcohol and drug abuse;
- prevention and treatment of mental and neurological diseases.

1.2 Western Pacific Region

The World Health Organization is a specialized agency of the United Nations which has a mandate to play a coordinating and guiding role in international health matters. WHO has its headquarters in Geneva and six regional offices in different parts of the world to cover specific geographical areas.

The Western Pacific Regional Office of WHO, located in Manila, Philippines, covers the area which has the largest population and greatest diversity in culture and in the level of socio-cultural development. At present, the following 26 countries and areas are Member States of the Western Pacific Regional Office of the WHO (WPRO).(6) They are: Australia, Brunei Darussalam, People's Republic of China, Cook Islands, Democratic Kampuchea, The Federal States of Micronesia, Fiji, France (French Polynesia and New Caledonia), Japan, Kiribati, Lao People's Democratic Republic, Malaysia, New Zealand, Papua New Guinea, Philippines, Portugal (Macao), Republic of Korea, Republic of

Marshall Islands, Samoa, Singapore, Solomon Islands, Tonga, Vanuatu, Viet Nam, United Kingdom (Hong Kong), United States of America (American Samoa and Guam).

Also, small island countries in the Pacific Ocean such as Northern Mariana Islands, Republic of Palau, Tokelau Islands, Tuvalu, Wallis and Futuna are covered by WPRO though they have not official status as Member States.

The above list shows that the Western Pacific Region of WHO includes many developing countries. WPRO functions as a centre to provide technical and financial cooperation to the above countries and areas in the Region .

1.3 Objectives of the study

In the past several decades, there have been major changes in the delivery of mental health services away from custodial hospital care to community based service. These changes in mental health service delivery are based on the development of new psychiatric technologies made available in recent years.

These technologies include the clinical use of various psychotropic drugs, techniques in psychosocial rehabilitation and our understanding of the appropriate services for mental patients.

However, the majority of the mental patients in developing countries are unable to enjoy the benefits of modern scientific technologies in psychiatry.

In many developing countries, mental health services are virtually nonexistent and, even if they exist, they are confined to custodial mental hospital care. In most of the cases, mental patients are just neglected or are provided care of questionable quality by lay practitioners such as traditional healers.

Since 1981, the author worked for ten years as Regional Adviser in Mental Health and Drug Dependence for the Office of the Western Pacific of the World Health Organization and collaborated with the Member States to develop mental health programmes. Through the collaboration with mental health workers in developing countries, a community based approach on mental health has been initiated and promoted. He had the task to find out humane, cost-effective and socio-culturally relevant approaches to increase the coverage and to improve the quality of scientific mental health services in countries with very scarce psychiatric resources.

The objectives of this paper are, therefore, to study the following issues with specific reference to developing countries in the Western Pacific region.

(1) Assessment of basic needs and available resources for mental health services from public health perspectives.

(2) Review of major constraints to develop public health approaches in mental health in countries with scarce resources.

(3) Identification of existing and possible technologies in mental health to be used as public health tools in developing countries.

(4) Practical application of public health approaches to the delivery of mental health services in developing countries in the Western Pacific Region.

Past experiences shows that in many developing countries in the Region, the traditional psychiatric framework and ordinary approaches are unable to solve the magnitude of the problems posed by mental and neurological diseases.

2. BACKGROUND OF THE STUDY

2.1 Magnitude of the problems

In the field of mental health, there exists many constraints in the assessment of the magnitude of mental and neurological problems. In particular, the standardization of diagnostic criteria across cultures becomes an important obstacle.

The Division of Mental Health of WHO, has made continuous efforts since its beginning in the 1950's to standardize diagnostic criteria for mental/neurological disorders and to coordinate epidemiological studies all over the world.(7) According to the estimates made at the Division of Mental Health of WHO, about 1% of the population in the world is affected with severe mental and neurological disorders and another 4 to 5 % suffer from mild to moderate mental and neurological problems including the abuse of alcohol and drugs.(8)(9)(10)

Our general understanding on the magnitude and nature of major mental and neurological disorders are the followings:

Severe mental and neurological disorders

0.8 - 1.0 % of the total population

Breakdown

Approximate

0.3% - psychosis, mostly schizophrenia.

0.3% - mental retardation including epilepsy.

0.2% - organic diseases of central nervous system
head injuries
cerebrovascular diseases
senile dementia
infections of central nervous system
e.g cerebromalaria, meningitis etc.

0.1% - others.

There are several variables which determine the magnitude of these mental and neurological problems. The demographic structure, the level of socioeconomic development, the cultural and social system are major variables in the epidemiology of mental and neurological disorders.

In the developing countries, the prevalence of epilepsy is reported to be 4 to 5 times higher than in developed countries due to poor perinatal care and higher chances of infection to the brain at early developmental stages.

The prevalence of mild to moderate mental and neurological disorders are estimated to be as follows:

Total - around 4 to 5% of the total population

They include:

Alcohol abuse

Drug abuse (including psychotropic drug)

Psychosomatic disorders due to stress

Neurotic disorders

Developmental disorders

The magnitudes of these conditions are greatly influenced by the culture, social system and level of socioeconomic development. For example, substance abuse is more often seen in countries with a free economy system.

However, with the rapid socioeconomic changes in recent years, problems such as drug abuse have much increased even in socialist countries like China and Viet Nam.

As a purely mathematical exercise, we can roughly estimate the number of people suffering from mental and neurological diseases and problems in the Western Pacific Region.

	Population (million)	Severe (1%)	Moderate (5%)
Australia	16.3	163,000	800,000
China	1,150.0	11.5 million	57.5 million
Fiji	0.7	7,400	37,000
Hong Kong	5.8	58,000	290,000
Japan	123.2	1.23 million	6.15 million
Korea	42.8	428,000	2.14 million
Malaysia	18.0	180,000	900,000
New Zealand	3.2	32,600	163,000
Papua New Guinea	3.2	32,000	160,000

Philippines	60.5	605,000	3.02 million
Singapore	2.5	25,500	125,000
Viet Nam	64.4	644,100	3.2 million

The above calculation is a pure mathematical speculation. However, it will give a very rough idea of the magnitude of mental and neurological diseases in the Region.

Among mental and neurological diseases, schizophrenia still poses the major challenge to mental health workers in developing countries. For example, according to the record, schizophrenia occupies about 88% of admissions to the National Centre for Mental Health in Manila, Philippines.(11) At the National Centre for Mental Health, diagnostic distribution of admission were as follows (1982).

Diagnosis	Percentage
Schizophrenia	88.05
Substance Abuse disorder	2.64
Affective disorder	2.13
Psychoses with epilepsy	2.01
Brief reactive psychoses	1.71
Psychoses with mental retardation	0.76
Others	2.70

Similar diagnostic pattern of psychiatric admission is observed in other developing countries in the Region such as China and Viet Nam.

However, in Australia and New Zealand the percentage of schizophrenia diagnosed at admission is relatively low. Listing by diagnosis at psychiatric admission in Western Australia (1981/1982) showed that schizophrenia occupied only 7% of the admissions. Other major diagnostic categories included alcoholic disorders (23%), non-psychotic depression (20%) and various other neurotic and adjustment disorders.(11)

In developing countries, schizophrenia, particularly the treatment of acute schizophrenia, is the major task of mental health professionals. Recently, there are theories that schizophrenia is decreasing in incidence or that their incidence is relatively low in countries spared from stressful life events. (12)(13)

The Kingdom of Tonga and other island countries in the Pacific are cited as good examples of these stressless countries.(14)

However, WHO international pilot study of schizophrenia, shows that schizophrenia exists across culture, race and socioeconomic level and that its incidence is relatively stable all over the world.(15)

The International Pilot Study of Schizophrenia (IPSS) is the most intensive and long-lasting international collaborative study in the field of mental health. IPSS has involved 20 centres in 18 countries and has lasted more than 20 years and covered more than 3,000 patients. According to IPSS, the incidence of schizophrenia is reported to be between 0.02 to 0.06% and the mean is 0.03% per annum per general population.

In many countries, psychiatric beds were built in order to meet the demand for treatment of schizophrenic patients with overtly abnormal behavioural problems. Therefore, the number of new schizophrenic patients will be a practical indicator of the magnitude of psychiatric needs in each country.

As a purely mathematical calculation, the number of new cases of schizophrenia in countries in the Western Pacific Region is estimated as seen below. The total number of psychiatric beds in major countries in the Region reported at the WHO meeting in February 1991 is also mentioned in the last column.(16)

	Population (million)	Expected new cases of schizophrenia (0.03 %)	Psychiatric Beds (total)
Developing countries			
China	1,150	345,000	85,116
Korea	43	12,900	12,241
Malaysia	18	5,400	4,100
Papua New Guinea	3	960	208
Philippines	60	18,000	6,836
Viet Nam	64	19,200	5,670
Developed countries			
Japan	123	36,900	355,334
Australia	16	4,800	8,959
New Zealand	3	900	2,790

The above figures shows us very interesting features related to the mental health services in the Region. In principle, medical facilities should be established based on the magnitude of health need. The above figures clearly shows the non-relevance of the number of psychiatric beds to the magnitude of psychiatric needs.

It is very interesting to note that in developing countries, the number of psychiatric beds is less than the expected annual number of new cases of schizophrenia (0.03 % of the total population), while their number is more than that of expected incidence of schizophrenia in developed countries.

In the absence of well developed community mental health services, the above figures clearly shows the absolute lack of facilities of mental health care in developing countries. However, present psychiatric knowledge demonstrates that the majority of schizophrenic patients can be managed in the communities with appropriate medical and social support.(17)

For the planning of national mental health programmes, it is useful to estimate the prevalence of schizophrenia. The prevalence of schizophrenia is estimated as about ten times that of the incidence. The theoretical background for estimating the prevalence of schizophrenia as ten times its incidence is as follows.

Incidence	0.03 % per annum per general pop.
Average lifespan after the onset	30 -50 years
Relative percentage of becoming chronic	1/3 - 1/5
Expected prevalence	0.03% * 30 * 1/3 = 0.3%
	(0.03 % * 50 * 1/5) = 0.3 %

However, the prevalence of schizophrenia is greatly influenced by several socioeconomic factors. The prevalence of schizophrenia in developing countries is expected to be lower than that of developed countries because of the following reasons.

- high percentage of population below 18

- better outcome of acute schizophrenia

- higher death rate after onset

A few epidemiological studies carried out in China support this hypothesis.

In the organization of mental health services in developing countries, it is important to know that only a tiny fraction of patients are recognized as having mental illness and are brought to the attention of medical professionals.(18)

It appears that a considerable portion of schizophrenia and similar diseases are taken cared of by extended family with the help of local healers and remained untreated.

The above facts add further difficulties in the evaluation and assessment of mental health needs in the communities in developing countries.

2.2 Mental health resources

In most of the developing countries, mental health is accorded very low priority by the government, and mental health services are poorly developed. Even in countries where mental services exist, they are confined to traditional psychiatric hospitals with closed doors.

In addition, mental health services are fragmented and they are developed merely to meet the demand of society to isolate patients from their community. Furthermore, there is a shortage of trained manpower in psychiatry. Also, psychiatric training of general health workers is deficient.

In the Western Pacific Region, the survey shows that mental health facilities and manpower in the developing countries are less than a tenth that of developed countries.

The number of psychiatrists per 100,000 population presented in country profiles at WHO meeting in 1991 was as follows:(16)

Australia	9.2
China	0.3 (1.0 including non-qualified mental health workers).
Fiji	0.02 (one psychiatrist for the whole country with a population of 660,000)
Hong Kong	1.24
Japan	7.08
Korea	1.58
Malaysia	0.28
New Zealand	5.64
Papua New Guinea	(One psychiatrist for a population of 3.2 Million)
Philippines	0.034 (Massive brain drain to U.S.A.).
Singapore	1.49
Viet Nam	0.09

The above figure clearly shows the absolute lack of trained psychiatric manpower in developing countries.

The number of psychiatric facilities in developing countries is similarly very scarce. The following figure shows the number of psychiatric beds per 10,000 population in selected countries in the Region.

Australia	7.4
China	0.73
Fiji	2.56
Hong Kong	7.3

Japan	29,1
Korea	2.86
Malaysia	2.28
New Zealand	8.55
Papua New Guinea	0.59
Philippines	1.13
Singapore	11.06
Viet Nam	0.78

In Australia, Malaysia, New Zealand and the Philippines, there has been a continuous decrease in number of psychiatric beds in psychiatric hospitals during the past ten years. This gradual decrease can be attributed to national mental health policies aimed at developing community based mental health services.

However, in Japan, the number is still increasing in spite of this already very high number. The changes according to the surveys supported by WHO in 1983 and 1990 are as follows (per 10,000 pop.):

	1983	1990
Australia	9.0	7.4
Malaysia	3.85	2.26
New Zealand	16.29	8.55
Philippines	1.81	1.13
Japan	27.4	29.1

The number of inpatients beds in the countries where WHO has major inputs are relatively small. However, there has been a continuous trend to increase this number in recent years.

They are as follows (psychiatric beds per 10,000 pop.):

	1983	1990
China	0.64	0.73
Korea	1.65	2.86
Papua New Guinea	n.a.	0.59
Viet Nam	n.a.	0.78

Changes in family structure, increased demand for psychiatric care and urbanization are considered the reasons for the increasing number of psychiatric beds in the above countries. Rapid urbanization and industrialization always bring changes in family structure away from the extended family toward nuclear family thus reducing the capacity of the family to take care of mental patients .

This trend will result in the steady increase of the inpatient population in psychiatric hospitals. The above mentioned trends clearly demonstrate the importance of strong national policies and programmes to develop community based mental health services in these countries. Without such strong policies and programmes, mental health services will develop in a passive manner only to meet the social demands for isolation of mental patients in psychiatric hospitals. In this context, the development of national policy in mental health is considered the priority in developing countries undergoing rapid socioeconomic changes.

During the author's assignment to the Region, active collaboration in the field of mental health were carried out in developing countries such as the People's Republic of China, Fiji, the Republic of Korea, Laos, Malaysia, Papua New Guinea, Philippines, Solomon Islands, Tonga, Viet Nam, and several small island countries in the Pacific.(19)(20).

3. METHODOLOGY

In the past ten years, a series of working groups for policy development, training courses and seminars and workshops have been organized both at regional and national levels. Various advisory services have been provided based on the requests of Member States. New research activities including a few multi-centre studies have been initiated and carried out.

The inputs of the regional mental health programmes in the past ten years from 1981-1990 may be summarized as follows:

3.1 Contribution to the development of national mental health policy formulation

In the past ten years, WHO has made continuous efforts to collaborate with Member States to develop comprehensive national policy on mental health through the organization of regional and national meetings and provision of consultant services.

Examples of these activities at the regional level shaping the basis of regional and national mental health programmes are the first, second and the third meetings of the Regional Coordinating Group on the Mental Health Programme, held in Manila in 1979, 1983 and 1987, respectively.(21)(22)(23)

The Fourth Regional Coordinating Group Meeting on the Mental Health Programme was convened in Manila in February 1991.(16)

A Regional Workshop on the Future Directions of Mental Health Services in the Western Pacific Region was convened in Manila in 1989 with a view to train participants from developing countries to develop culturally relevant community based mental health

services in their countries.(24) Up to date information on mental health services in the Region were provided to WHO by the participants of these meetings.

On the average, 15 to 20 leaders in mental health fields in countries in the Region attended the meetings to review the past developments, discuss present constraints, identify priority areas in regional and national mental health programme developments.

Country reports presented by participants at the above meetings were very useful sources for information on mental health services in the countries in the Western Pacific Region.

In addition to meetings on mental health services, several meetings concerned with specific topics of priority mental health /substance abuse were also organized. These meetings included such topics as prevention and control of drug dependence, mental retardation, child mental health, community approaches on alcohol-related problems and psychiatric education for the 21st century. (25)(26)(27)(28)(29)

In the past ten years, alcohol abuse become serious public health and social issues in many countries in the Pacific. Based on the urgent requests from Member States, three regional training courses were held for government officers and health workers to develop programmes for the prevention and treatment of alcohol related problems.(30)(31)(32) One sub-regional workshop was held to address the issue of alcohol and drug abuse for Micronesian countries.(33) These meetings provided excellent opportunities to gather information on the magnitude, nature and trend of problems related to specific mental health issues in the Western Pacific Region.

At national level, meetings of national coordinating group on mental health were organized in China, Malaysia, Philippines and the Republic of Korea.

Based on the recommendations of the Regional Coordinating Groups, meetings of National Coordinating Group on Mental Health were organized in Beijing in 1985, 1987 and 1989 with the participation of different ministries to discuss priorities in mental health in the People's Republic of China.

Also, a national workshop on forensic psychiatry and mental health legislation was held in Tienjing in 1988 and a national workshop on mental health law was held in Chengdu in 1990. These workshops facilitated the preparation and formulation of mental health law in the People's Republic of China.

In the Philippines, WHO supported the first and second multi-sectorial workshop on mental health programmes which resulted in several innovative approaches in the formulation of the national mental health plan and programmes.

In the Republic of Korea, WHO collaborated with the Ministry of Health and Social Welfare and leaders in psychiatry in the development of community based mental health services and of mental health legislation.

Efforts have been made to develop a national mental health programme in the context of primary health care in Malaysia, Lao People's Democratic Republic, Papua New Guinea and Viet Nam through the provision of advisory services and the organization of national meetings.

3.2 Development of manpower in mental health

The lack of manpower in mental health in developing countries was considered the most crucial impediment in the development of community based mental health services in the Region.

A series of training courses, workshops and seminars have been organized both at regional and global levels to develop manpower in the field of mental health/substance abuse.

At regional level, three regional training courses were held for government officers and health workers to develop programmes for the prevention and treatment of alcohol related problems. One sub-regional workshop was held to address the issue of alcohol and drug abuse for Micronesian countries.

Also, a regional workshop on the future directions of mental health services in the Western Pacific Region was convened in Manila in 1989 with a view to train participants from developing countries to develop culturally relevant community based mental health services in their countries.

At national level, WHO collaborated in the organization of a number of training courses and workshops to develop national programmes on mental health and alcohol and drug abuse in almost all member states in the Region.

In particular, these training programmes have contributed to the mental health manpower developments in China, Lao People's Democratic Republic, Papua New Guinea, the Philippines and Viet Nam.

In China, WHO has collaborated in the reorganization of the mental health services after the period of the Cultural Revolution by providing consultancy services and conducting workshops and seminars on such topics as psychiatric epidemiology (1980), psychiatric undergraduate education (1981), child mental health (1981), mental health in general health care (1982), psychosocial aspects of primary health care (1983), postgraduate training in mental health (1984), mental health in the aged population (1985), mental retardation (1986), psychotherapy and counseling (1987), forensic psychiatry and mental health legislation (1988), school mental health (1989), psychosocial rehabilitation of chronic patients (1990) and mental health law (1990). These workshops in China each times had 80 to 100 participants coming from all the provinces of China. WHO provided consultant services for the above activities and the writer participated in the planning and conduct of most of the above training programmes.

3.3 Promotion and coordination of research

In accordance with the policy of decentralization of research activities to the Region, a number of research projects were undertaken on problems of regional public health importance since 1982-1983.

The main topics of research conducted in the Region have included epidemiological studies on mental and neurological disorders (China), studies on provision of mental health care(China, Republic of Korea and Laos), research on the mental health of vulnerable groups such as children and elderly (China), mental retardation (China) and those related to alcohol and drug abuse.

In October 1984, a Meeting of Heads of WHO Collaborating Centres for Mental Health was convened in Tokyo to discuss ways of promoting coordination between WHO centres and leading national research institutes to develop collaborative research activities.(34)(35).

This has resulted in the organization of several multi-center research in the Region: regional collaborative study on affective disorders (Nagasaki, Seoul and Shanghai), bio-psycho-social studies on children (Tokyo, Seoul and Beijing) and health seeking behaviour in psychiatry (Seoul, Tokyo, Chengdu, Changsha, Kuala Lumpur and Manila).

In 1990-1991 three research projects were initiated to evaluate the effectiveness of psychosocial rehabilitation of chronic patients in China, Laos and Viet Nam using a similar research protocol developed in the Regional Office.

During the period 1981-1990, a number of leading research and training institutes were identified as WHO Collaborating Centres. WHO Collaborating Centres have become essential partners in developing research and training in mental health and neurosciences.

At present, there are ten WHO Collaborating Centres in the field of mental health, neurosciences, alcohol and drug abuse and accident prevention in the Western Pacific Region. (Five in China, three in Japan, and one each in Australia and New Zealand).

4. FINDINGS

4.1 Sources of information and data

The writer made a survey of the bibliography on mental health programmes carried out by the Western Pacific Regional Office since the beginning of its operation in 1948. The survey covered publications, reports, articles and other materials that have been written in connection with the mental health programmes of the World Health Organization. The bulk of this literature is reports of consultants and regional advisers.(36) (37)

The cumulative number of these documents was as follows:

1948-1960	14
1961-1970	19
1971-1980	53
1981-1990	167
Total	253

The size of the bibliography shows a steady increase in activities related to mental health in the Western Pacific Region. The following sources of information and data were used to study issues mentioned in the objectives:

(1) Review of country profiles presented at various WHO meetings by participants coming from member states.

(2) Visits to member states by the author and consultants to collaborate in the formulation of national plan on mental health and in the promotion of training and research programmes.

(3) Reports of research projects supported by the Regional Office.

In addition, informal and formal meetings with leading experts in mental health and public health administration in the Western Pacific Region in the past ten years have been the important sources for the development of the author's ideas about public health framework and approach to mental health.

4.2 Changes at Member States

Following reports were made by the participants of the Fourth Regional Coordinating Group Meeting on the Mental Health Programme held in Manila in February/March 1991.

(1) China

In the last ten years, active collaboration between the Ministry of Public Health of the People's Republic of China and WHO in the field of mental health has greatly developed mental health services, manpower training and research in China.(38)

Some major achievements have been:

(a) The formulation of a national mental health programme and establishment of coordinating groups at different government levels was achieved in 1985. Under this programme the efforts of different government departments and mental health professionals were mobilized nationwide and remarkable progress was made.(39)(40)(41)

(b) Community based mental health services have gradually been popularized in some provinces, areas and cities. In urban areas rehabilitation stations have gradually been adapted and in rural areas community home care mental health services have been developed. More attention has also been paid to psychosocial rehabilitation of the chronically mentally ill.(42)(43)

(c) The programme on psychosocial factors and mental health made definite progress. Programmes involving psychological counselling, brief psychotherapy, and behaviour modification - dealing with psychosocial and behaviour problems - have been set up in some general hospitals, universities and schools in some large cities.

(d) The manpower training programme has been further improved, with short-term training programmes in psychiatry being given higher priority through teaching hours being provided in the medical curriculum.(44)

(e) Mental health legislation

The protection of the right of the mental patient was one of the major concerns in the national mental health programme for 1986-1990. Two workshops,

supported by WHO, were held: one in 1987 and one in 1990. WHO consultants were invited to give lectures on the human rights of mental patients, and the legal and medical approaches to involuntary hospitalization. The comprehensive development of mental health law is scheduled to be completed through national mental health programme 1991-1995.(45)(46)(47).

(2) Lao People's Democratic Republic

Since 1980, neuropsychiatric consultations have been held in Mahosot Hospital in the capital city of Vientiane, and four bed psychiatric unit was opened there in 1987. The small number of staff are involved in service delivery to the local area, and are committed to undergraduate nursing and medical student teaching, as well as seminars to educate health personnel and community leaders from the provinces.(48)(49)(50).

The service is heavily constrained by its limited resources; however it is committed to family involvement in the management of its patients.(51).

(3) Malaysia

Striking changes have taken place in the mental health services in Malaysia in the past ten years.(52)(53). The main changes concern:

(a) A rapid decline in bed numbers and bed utilization in the country's two large mental hospitals and two smaller ones coupled with a corresponding increase in utilization of general hospital based psychiatric units of which 17 exist today. The mental hospital atmosphere has also changed with modernization, rehabilitation programmes, and the removal of restrictions.

(b) The shift to general hospital psychiatric units has also led to a wider network of 80 peripheral and mobile clinics and thus a better accessibility to mental health services. There has been a parallel increase in emphasis on community-based rehabilitation for the mentally-ill. Fifteen-day rehabilitation and industrialization rehabilitation programmes (about half of them run by NGOs), cater for psychosocial rehabilitation.

(c) Another major thrust of the 1980s has been increased and improved training programmes. The number of psychiatrists under training is currently 40 or about 80% of the total number of trained psychiatrists currently practising in Malaysia. There has been an increase in numbers of trainees going into psychiatric nursing and occupational therapy. A National Mental Health Committee was formed in 1990.

(d) The curricula of medical students in the three medical schools have all been revised to emphasize teaching of psychiatry in primary care and general practice, focusing on issues such as anxiety and depression. Teaching is also increasingly being done in non-psychiatric settings, such as medical or surgical wards and clinics.

Training of general duty medical officers and general practitioners in basic psychiatric diagnosis and treatment has been started and expanded during the past ten years.

(e) Nongovernmental organizations such as the various counselling and mental health associations have been growing in strength and receive strong support from the psychiatrists in the country.

(f) Treatment programmes for alcohol and drug abuse are run by the Ministry of Home Affairs and NGOs but have regular visits and advice from psychiatrists.

There is a need for help in strengthening the teaching of psychiatry to non-psychiatrists and in postgraduate training with more input from biological psychiatry. Malaysia is willing to share its experience in psychosocial rehabilitation and drug dependence rehabilitation with other countries in the Region.

(4) Papua New Guinea

In Papua New Guinea, health services have been decentralized to the 19 provincial governments. Mental health services however remain a national function and do not fit very well into this decentralized system. Health workers both in the Government and in missions are responsible for providing mental health services through the general hospital system.(54)(55)(56)(57).

(a) Mental health problems

Prevalence of severe mental illness seems to be in line with the international statistics. Schizophrenia and affective psychosis are the two leading causes of admission. Alcohol associated problems are now being seen in the national population.

The teaching of general health workers in psychiatry through the primary health care approach is a priority. The formation of the National Alcohol Council is now before the National Executive Council for a decision. The Health Education Advisory Committee on Alcohol and Tobacco Abuse is doing a good job and will continue to play a major role in drug and substance abuse. Legislation on compulsory seat belt usage was passed on 19 October 1990 and it is hoped that the use of breath analysers by police will be passed as well.

(b) Manpower

There is a gross shortage of psychiatrists. The country will continue to employ overseas psychiatrists and it plans to increase from one to four the psychiatrists who will provide regional support to general health workers. The centralized mental health function will need to examine decentralizing to provinces, and the provinces that do not have psychiatric nurses will need encouragement to send their own nurses to be trained in psychiatry.

(c) Mental health legislation

Although there is mental health legislation in the country, it urgently needs to be reviewed.

(5) Philippines

In the Philippines, WHO supported the first and second multi-sectorial workshop on mental health programmes. The workshops resulted in several innovative approaches to the formulation of a national mental health plan and programmes.(58)(59)

The recent changes in the Philippine mental health plan were started in 1987. There has been an effort to move psychiatric patients out of mental hospitals so that treatment

can be provided in the community. At the same time, there is a move away from confining the mental health programme to purely medical and psychiatric concerns to the psychosocial factors operative in high risk populations. The street children, the overseas workers and the victims of violence and disaster have been identified as groups of special concern. It is accepted that this focus on psychosocial factors will require the active involvement of disciplines other than psychiatry.

The basic strategies of the programme centre around a nationwide diffusion of expertise into the periphery, training and research. These will rest on a foundation of institution building, both at the national and regional levels, and the development of clinical policies which will be adopted by the whole organization of the Department of Health.

The regional mental health coordinators have been charged with the responsibility for the programme at the regional level. A drug abuse rehabilitation centre will soon be established in the National Centre for Mental Health, which will also serve as the national resource for training. Active intervention to prevent the psychosocial consequences of disaster (e.g. earthquakes) was intensively pursued in six provinces and cities in 1990. This activity has helped tremendously in demonstrating to the public the relevance of mental health programmes, and has served to facilitate their acceptance.

The main concern is the economic uncertainty for the future which can negate all the gains that have been attained so far.

(6) Republic of Korea

Major achievements have been made in the past ten years; there has been an increase in the number of psychiatric beds from 5325 to 12 241. There has also been a concomitant rise in the number of psychiatrists from 348 to 991.

Efforts to improve mental health education were made through the media and public lectures. Also, efforts have been made to enact legislation to promote mental health. WHO supported seminars and symposia helped to increase the awareness among mental health professionals of the need to develop community based mental health care.(60)(61)(62).

Despite all the progress made, major problems still need to be addressed. Large mental hospitals are still being built without provisions for rehabilitation services. There is a rise in alcohol and drug abuse. The poor motivation for developing community based mental health care has led to the neglect of patients by their families and by society at large. In addition, not enough attention has been paid to children and the aged.

To tackle both old and new problems, a number of steps will have to be taken. A division for mental health will have to be established in the Ministry of Health and Social Affairs. For community based mental health care to develop, the government budget for mental health will have to be increased. Intensive and systematic mental health education will need to be directed not only towards the general public and the families of patients but also government officials.

Continuous efforts will have to be made to formulate suitable mental health legislation. The promotion of research in the traditional views and practices in mental health will be important in helping to shape service delivery models which are compatible with community mental health needs.(63)(64).

The development of rehabilitation programmes and social support systems will help to ensure the success of community based health care.

(7) Viet Nam

(a) Major achievements

(i) Primary mental health care

Four hundred commune dispensaries have activities on mental health in connection with a system of 250 district mental dispensaries and 25 provincial mental dispensaries.

(ii) Study on psychosocial and behavioural disorders

Five national seminars have been held on mental handicap, mental retardation, conduct disorders in adolescents, cerebral trauma due to traffic accidents, and drug abuse, with the participation of various concerned ministries, youth and women's organizations, and WHO consultants.

(iii) Cooperation with WHO

Progress in the mental health programme has been supported by WHO consultants and experts from many fields. (65)(66)(67)(68).

(iv) Training of psychiatrists and reform in psychiatric education

Training of 30 preliminary specialized psychiatrists, and ten Grade I psychiatrists takes place annually. Now 560 psychiatrists are working in: 16 mental hospitals, 38 psychiatric departments of general hospitals, 25 provincial and city mental dispensaries.

Problems and constraints are mainly due to financial difficulties.

The establishment of a National Mental Health Institute is planned in the near future.

(8) Other islands countries in the Pacific

Efforts have been made to develop a national mental health programme in the context of primary health care in countries and areas in the Pacific such as Fiji, Marshall Islands, Samoa, Solomon Islands and Tonga through the provision of advisory services and the organization of national meetings.(69)(70)(71)(72)(73)(74).

These collaboration stimulated the author to study public health approach to mental health in different socio-cultural conditions and to find out some commonalities and essential components in mental health delivery.

5. DISCUSSIONS

5.1 Essential components in mental health services

The author wishes to identify psychiatric technologies which are appropriate as public health tools in developing country situations with scarce mental health resources.

The author would like to discuss followings as the most essential components of modern psychiatric technologies.

(1) Scientific understanding of mental and neurological disorders

(2) Psychotropic medication

(3) Psychological support

The author would like to discuss also our knowledge of community mental health service systems. A community based service system is the public health application of these essential psychiatric components.

The above four components also correspond to four major obstacles existing in many developing countries. They are

- strong stigma attached to mental and neurological disorders

- shortage and lack of continuous supply of psychotropic drugs

- insufficient training of health workers to support community based mental health services

- non-existence of comprehensive national policy on the delivery of mental health services

The above obstacles are not easy obstacles to overcome in many developing countries. The WHO mental health programme has collaborated with the Member States in developing countries to overcome these constraints.

(1) Scientific understanding of mental and neurological disorders

Even though it has been after two centuries since Philip Pinel freed mental patients from chains in France, a strong stigma to mental and neurological diseases still persists in many countries.

It is reported that in many developing countries, the majority of first admission patients to psychiatric hospitals have had previous contacts with traditional healers and healings. Only when all these traditional methods have failed are the patients referred for psychiatric consultations. This may also be true for many other countries where there is a strong stigma attached to mental patients and psychiatric hospitals.

It is a very difficult challenge to reduce the stigma attached to mental patients. However, in Pakistan, a school mental health programme was reported to be very

successful in reducing the stigma attached to mental illness.(75) School children recited the following song every morning:

- Smoking is injurious to health
- It is not nice to drink alcohol and use drugs.
- Mental illness is not caused by evil spirits.
- Mental illness can be easily treated by medicine

After the school mental health programme in Pakistan, many untreated mental patients were referred for psychiatric consultation for the first time.

In countries with a high illiteracy rate, school children are sometimes the most educated members in their families.

As a part of a community rehabilitation programme (CBR), WHO developed the training manual for families to deal with persons with abnormal behaviour and epilepsy.(76) Some of the family training principles developed for the community rehabilitation programme are very useful to promote the scientific understanding of mental and neurological diseases in developing countries. They are as follows:

(a) Mental illness is an illness like other illness, not caused by evil spirits. It is similar to tuberculosis, malaria, leprosy and diabetes mellitus.

(b) Relapse can be prevented by medication like in malaria. Without medication, six out of ten mental patients will have relapse within two years after the first recovery. With medication, only two in ten will relapse.

(c) Mental illness relapse can be prevented further by reducing stress, tension and conflict in the community and family. The mentally ill do better and have less relapse with community and family approval, understanding and support.

Strong stigma or a fatalistic attitude exists even among mental health professionals. This results in the long term hospitalization of mental patients in closed wards.

In the past, WHO has promoted the family training programme for mental patients in several countries in collaboration with the World Association of Psychosocial Rehabilitation (WAPR).(77)

(2) Psychotropic medication

The introduction of antipsychotic and antidepressant medication since the 1950's has significantly revolutionalised mental health services.(78) This medication has facilitated the development of open door policies, deinstitutionalization and community psychiatric programmes. There is no doubt that psychotropic drugs constitute the mainstay of essential technologies in mental health.

Several recent studies show that about 60 % of schizophrenics will relapse on a placebo whereas relapse rates on active medication average just below 20% after follow up periods of up to 2 years. (79)(80)

In poorer developing countries, the supply of psychotropic drugs is the key issue in the development of mental health services. This problem is complicated by the following factors:

(a) Scarce national resources to purchase psychiatric drugs;

(b) Logistic problems in distributing drugs to health facilities;

(c) Financial constraints of families or patients to purchase psychotropic drugs;

(d) Low compliance of family or patients;

(e) Lack of training of general health workers in the use of psychotropic drugs including the management of side effects.

WHO has been concerned for a long time with the supply of psychotropic drugs for wider populations in developing countries .

In this context, WHO has developed a list of essential psychotropic drugs and has provided Ministries of Health in developing countries with information about how to obtain and maintain adequate supplies of the psychopharmacological agents on the Essential Drug List.(81)

The Western Pacific Regional Office collaborated with the governments of Laos and Viet Nam in the purchase of essential psychotropic drugs.

The following table shows some of conditions related to the supply of psychotropic drugs in countries of the Region.

	Medical Insurance	Supply of psychotropics	Logistics
Australia.	Universal	sufficient	easy
China	none	limited	depend on locus
Fiji	none	limited	easy
Hong Kong	limited	sufficient	easy
Japan	universal	sufficient	easy
Korea	universal	sufficient	easy
Malaysia	limited	limited	depend on locus
New Zealand	universal	sufficient	easy
Papua New Guinea	none	limited	difficult
Philippines	none	limited	difficult
Viet Nam	none	limited	difficult

The supply of psychotropic drugs is very limited and their distribution is difficult in many islands countries in the Pacific island countries.

In countries such as China and Viet Nam, medical services used to be free of charge and available to all the population. However, in recent years, free market systems have been introduced in the health field in these countries. This change has resulted in an increased financial burden on families for psychiatric treatment of their family members.

Patient compliance is another important factor for the success of psychotropic medication. Depot neuroleptics have an advantage in term of improved compliance at least at the initial stage. Also, it was found that general physicians prefer the use of long acting injection compared to the use of oral prescriptions.

It is an important factor in the implementation of any community based programme for mental illness to get the cooperation of non-psychiatrists. Another important factor to consider is the duration of psychotropic medication.

Multi-drug therapy for leprosy has been successful as a public health measure because it can promise a complete cure to patients and their families at the end of six months' treatment.

We have to admit that the use of psychotropic medication can not guarantee cure of all schizophrenia for life. However, it is not practical to impose the image of life long psychotropic medications for new schizophrenic cases, particularly in developing countries. This would greatly disappoint family members and endanger compliance. Therefore, what criteria can be set up to improve the compliance of patients and families for treatment with psychotropic medications.

From a public health perspective, the following durations are presented as possible criteria for appropriate follow-up psychotropic medication for patients diagnosed as schizophrenia in developing countries.

Duration of medication	Case	
- 3 to 6 month	For case with first episode	- About 60 % of new cases will relapse within two years.
- 6 month to one year	For case of first relapse	- Teaching of predromal signs of relapse to patients and family members can significantly reduce the risk of relapse.
- life long	For cases after second relapse	- Psychosocial education is essential for these patients.

Needless to say, the appropriate duration of psychotropic medication should be decided case by case. However, the above standard may be useful as the side-effects of long term psychotropic medication are more and more documented.

WHO Mental Health Division at present plans to evaluate studies about different duration of psychotropic medication. The necessary duration of psychotropic medication is still an area for research from the public health point of view.

(3) Psychological support

No one will question that psychological support is the most unique and essential technology in mental health. From a public health perspective, however, it is a very difficult technology to identify, transfer and evaluate.

After the advent of Sigmund Freude, countless varieties of technique in psychotherapy and other forms of psychological support have been introduced into psychiatry. However, psychological support practiced as individual and group therapy in developed world are seldom discussed for use in developing countries. Furthermore, it is relatively recently that psycho-social support for people with schizophrenia has become an essential part of treatment.

Psychological support for schizophrenic patients.

In recent years, there have been increased interest in the use of psychosocial support in the treatment of chronic schizophrenic patients.(82)(83) These interests were stimulated by practical experiences in developed countries such as the psycho-education approach and the control of expressed emotion in dealing with schizophrenic patients.(84)

There are several approaches aimed at providing psychological support to schizophrenic patients in developing countries. The author was impressed by some culturally relevant approaches in the Region treating patients along with family members.

For example, the National Mental Hospital in Manila, developed a programme called the acute crisis intervention service (ACIS).(85) The programme requests all acute ill patients to stay with a family member at ACIS for evaluation and intensive treatment for three days. This programme enables the education and training of a family member in how to deal with patients after discharge. Similar family training principles used for community based rehabilitation programme (CBR) are used in this country.

According to the Director, this programme was able to reduce hospitalization about 70%, thus contributing to the decongestion in the hospital.

In Asian countries, it is not rare for family members to stay with patients during hospitalization. This custom provides an excellent opportunity for training family members in the control of medication, management of side effects, simple techniques of psychosocial rehabilitation, proper attitudes in dealing with patients including the control of expressed emotion, etc.

It will be very important to integrate psychological support as an essential technology for mental health in developing countries. The above mentioned approaches are possible and more relevant to the developing countries where the extended family system favours these methods. Another advantage is that these programmes are relatively cost-effective and human centered, not requiring expensive equipments.

5.2 Strategy for community mental health service

In mental health service delivery, community care in developing countries has several advantages compared to hospital based care .

Some of the problems of hospital centered care in developing countries are summarized as follows:

- Scarce inpatient resources are unable to cope with the increasing need for mental health care resulting from urbanization and industrialization.

- It is financially impossible for many developing countries to build psychiatric beds as a solution to this problem.

- Hospital centered care sometimes produces negative side effects of hospitalization such as institutionalism and the perpetuation of pathological symptoms.(86)

- Long term hospitalization disrupts the chance to resume work and roles in family and social life.

- Psychiatric hospitalization in many countries stigmatizes the patient and his/her family beyond repair.

The above problems of hospital centered care reflect the advantages of community based care in developing countries. They are:

- It is possible to develop the least restrictive, humane and cost-effective services relevant to socio-cultural conditions of the country.

- Community care reduces symptoms of institutionalism and enhances his coping skills in the community.

- Community care, if wisely provided, will reduces the stigma of mental and neurological disorders.

This approach provides the opportunities for education with the goal of scientific understanding of mental illness in the community.

Even countries with sufficient resources in mental health such as Japan, Italy, and U.S.A, their hospital based mental health services are sometimes reported as deficient and inhumane. (87)(88)(89) They have even become the targets of international criticisms for violation of basic human rights.

(1) Sectorization

There are many models of community based mental health services in the World. Each model has its own advantages and disadvantages and is closely linked to the socio-cultural and economic background of the country.

Here, the writer would like to present the model of community based mental health service developed first in France (sectorization). (90)(91) Compared to the mental health service delivery systems in other countries, the programmes of sectorization developed in France have proven relatively successful. Similar programmes have been introduced into Portugal, Morocco, Algeria and a few other countries.(92)

In the course of collaboration with Member States, the writer found some of the principles of the programme of sectorization helpful in formulating a public health framework in mental health in developing countries. Some of the basic principles of sectorization are summarized as follows: (93)

(a) The whole mental health system should be viewed from the community perspective and not from the hospitals. Therefore the financing system should be community based and not hospital based. Hospital service should be viewed as a part of the community mental health service.

(b) Community based mental health service is based on a base catchment area. In Paris one team of the sector has responsibility for a population from 200,000 to 500,000 people. A sector has a variety of psychiatric facilities. These will include:

- residential care
- out-patient care
- home visit etc.

The psychiatric team of the sector has final responsibility for the sector to ensure the comprehensiveness and the continuity of the service. The team has an access to the varieties of mental health facilities in the sector and decide the best use of these facilities for a patient.

(c) The psychiatric team is composed of various mental health professionals including psychiatrists, nurses and social workers.

At the same time, psychiatric team is responsible for preventive and rehabilitative activities in the communities:

- patient education
- family training
- vocational training
- vocational guidance
- assistance to housing
- support to family group

The basic factors in sectorization are not facilities, but the following:

- a community centered view of mental health services
- catchment area
- comprehensiveness and continuity of care
- psychiatric team

The author found that some of the principles of sectorization can be adopted or adapted in the development of mental health services in developing countries. In past years, the writer collaborated with French consultants to introduce the principles and approaches of sectorization to China, Laos and Viet Nam.(78) It seems clear that these

activities have contributed to broadening the scope of psychiatrists in these countries beyond narrow institutional care to community based care.

(2) Integration of mental health in general health

Sectorization is a useful conceptual model for developing community based mental health services which are humane and cost-effective. However, it is impossible to secure manpower solely for mental health services in countries with scarce resources. It would be a luxury to have a psychiatric team of trained psychiatrists, psychiatric social workers and psychiatric nurses in many developing countries.

In a few Asian developing countries, the psychiatric training of general physicians and nurses have proved to be the most effective way to increase mental health services in rural areas. In Malaysia, qualified psychiatrists are spending more time training of general physicians than training of junior psychiatrists.

In many developing countries, it will be more practical approaches to train general physicians in basic psychiatric knowledge and skills rather than training qualified psychiatrists. In this context, WHO supported the Philippine Government to organize short term (two weeks each) training courses for government physicians and nurses stationed in provinces to enable them to follow up discharged patients from the National Center for Mental Health, Manila.

At the same time, the National Mental Hospital established a discharge and follow-up committee to make regular visits of supervisory services in rural provinces by a psychiatric team.

These approaches enabled the decongestion of the National Center for Mental Health in Manila. Their inpatient population has decreased from 5,000 to 2,000 over five years.

WHO organized several meetings of experts to develop strategies extending mental health services in the developing world.(17). These meetings reviewed a multicentre study for the extension of mental health care in primary health care. The study showed that primary health workers can identify most psychiatric problems using flow charts after a short period of training. Also, the study revealed that an unexpected large proportion of patients primarily suffering from psychological and family problems are treated in the general health care system without being identified as such.

The outcome of its study drew attention on the need of psychological supports in primary health care in developing countries.

The survey carried out in seven health centres in developing countries showed that 10% to 17% of the patients consulted at primary health care level suffer primarily from psychological and familial problems and that they can benefit from psychological support .

From the psychiatric points of view, 48% were diagnosed as suffering from depression, 40% anxiety, 4.8% schizophrenia and other psychoses, and 5.2 % other disorders. As much as 75 % of these disorders were not recognized by primary health workers as such and tended to become chronic.(94) These results show that training in mental health skills of general physicians and nurses are necessary and indispensable in developing countries alike in developed societies.

WHO will continue its efforts to integrate mental health into general health care as the practical means to increase coverage for mental health services in developing countries.(95)(96) It is too expensive and time consuming to train qualified psychiatrists in developing countries.

We also have to take into consideration the tragic fact that a considerable number of trained psychiatrists from developing countries are lost to their countries as a result of brain drain.

(3) Consumer involvement in mental health

The involvement of family members and patients in treatment and rehabilitation is now considered a key for the success of mental health programmes in countries with scarce resources.

WHO published a few documents designed to improve care of people disabled by chronic mental illness, particularly schizophrenia. (97)(98)

These publication states some of the basic principles necessary for the supports of the chronically mentally ill. They include:

(a) It is essential to make patient and family collaborators in treatment. Therefore, education of patients about their illness becomes an important part of the treatment. At the same time, training of family members in the care of the patients become indispensable.

(b) Treatment of schizophrenia should be planned just like the treatment of diabetes mellitus and hypertension. They require the patient's initiative, regular taking of medicine and continuation of a healthy life style.

(c) Mental illness relapse can be reduced by regular taking of medicine, reduction of stress, tension and conflict in the community and family. The mentally ill do better and have fewer relapse with community and family approval, understanding and support.

(d) Increased involvement of patients and family should be utilized in the design, implementation and evaluation of treatment. Some recent research suggests that what is needed most is social support and intervention designed to enhance the capabilities of patients to live independently and effectively in the community.

Assistance with housing, education about symptoms and medication management, social skills training and vocational training have been shown to lead to the best community outcome for those with chronic mental illness.

In this context, WHO consider it essential to strengthen patients' groups and family associations as effective means to develop mental health services.

6. CONCLUSIONS

6.1 Assessment of basic needs and available resources for mental health services from public health perspectives

(1) According to the estimates made at the Division of Mental Health of WHO, about 1% of the population in the world is affected with severe mental and neurological disorders and another 4 to 5% suffer from mild to moderate mental and neurological problems including the abuse of alcohol and drugs. Among mental and neurological diseases, schizophrenia still poses the major challenge to mental health workers in developing countries.

(2) The number of psychiatric facilities in developing countries are very scarce. For example, the number of psychiatric beds in most of developing countries in the Region is only one tenth compared to that of developed countries such as Australia, Japan and New Zealand.

It is very interesting to note that in developing countries, the number of psychiatric beds is less than the expected annual number of new cases of schizophrenia (0.03 % of the total population), while their number is more than that of expected incidence of schizophrenia in developed countries.

In the absence of well developed community mental health services, the above figures clearly shows the absolute lack of facilities of mental health care in developing countries.

(3) In Australia, Malaysia, New Zealand and the Philippines, there has been a continuous decrease in number of psychiatric beds in psychiatric hospitals during the past ten years. This gradual decrease can be attributed to national mental health policies aimed at developing community based mental health services.

However, in Japan, the number is still increasing in spite of this already very high number.

(4) The number of inpatients beds in the countries where WHO has major inputs are relatively small. However, there has been a continuous trend to increase this number in recent years in China, Republic of Korea and Viet Nam.

Changes in family structure, increased demand for psychiatric care and urbanization are considered the reasons for the increasing number of psychiatric beds in the above countries.

Rapid urbanization and industrialization always bring changes in family structure away from the extended family toward nuclear family thus reducing the capacity of the family to take care of mental patients. This trend will result in the steady increase of the inpatient population in psychiatric hospitals.

The above mentioned trends clearly demonstrate the importance of strong national policies and programmes to develop community based mental health services in these countries.

Without such strong policies and programmes, mental health services will develop in a passive manner only to meet the social demands for isolation of mental patients in psychiatric hospitals. In this context, the development of national policy in mental health is considered the priority in developing countries undergoing rapid socioeconomic changes.

6.2 Review of major constraints to develop public health approaches for mental health services in countries with scarce resources

Well developed community mental health services are able to reduce the number of the chronically mentally ill people through the prevention of relapse and social breakdown syndromes. However in many countries and areas in the Region, services for schizophrenia and epileptic patients are simply not existent or very scarce and, even where they exist, they tend to be hospital-centered and inhumane.

Actually, in most of developing countries, many of the patients with mental and neurological disorders had no access to scientific psychiatric treatment. The strong stigma attached to mental and neurological disorders and low priority of mental health in the Government are long standing and common obstacles in many countries.

(1) A lack of coordinated national policies and programmes.

Among others, a lack of coordinated national policies and programmes on mental health is the most single important constraint to develop public health approaches in mental health in countries with scarce resources.

Mental health services are considered the responsibility of mental health workers and are confined to psychiatric hospitals and teaching institutions in psychiatry. There exist very few opportunities for technically competent experts to have the authority to plan a comprehensive national policy and programme of community based mental health services.

(2) A lack of manpower in mental health

According to the survey, the number of mental health workers in developing countries in the Region is about one tenth that of developing countries.

In addition, very little education and training in mental health is given to general physicians and primary health workers.

(3) A lack of useful materials and information for mental health workers in developing countries.

Very few materials and little useful informations are available for the daily practice of mental health workers in developing countries. Almost all publications and journals are academic in nature and for psychiatrists and other mental health professionals in highly developed countries.

The research opportunities for mental health experts in developing countries are also very rare.

6.3 Identification of existing and possible technologies in mental health to be used as public health tools in developing countries

(1) The author discussed the following as the most essential components of modern psychiatric technologies.

- Scientific understanding of mental and neurological disorders
- Psychotropic medication
- Psychological support

(2) Some of the family training principles developed for the community rehabilitation programme have been very useful to promote the public health approach in mental health in developing countries.

The family training principle teaches that mental illness is an illness like other illness, not caused by evil spirits. It is similar to tuberculosis, malaria, leprosy and diabetes mellitus.

In the past, WHO has promoted the family training programme for mental patients in several countries in collaboration with the World Association of Psychosocial Rehabilitation (WAPR).

(3) There is no doubt that psychotropic drugs constitute the mainstay of essential technologies in mental health.

Several recent studies show that about 60% of schizophrenics will relapse on a placebo whereas relapse rates on active medication average just below 20% after follow up periods of up to 2 years.

In poorer developing countries, the supply of psychotropic drugs is the key issue in the development of mental health services.

This problem is complicated by the following factors:

- Scarce national resources to purchase psychiatric drugs;
- Logistic problems in distributing drugs to health facilities;
- Financial constraints of families or patients to purchase psychotropic drugs;
- Low compliance of family or patients;
- Lack of training of general health workers in the use of psychotropic drugs including the management of side effects.

(4) There are several approaches aimed at providing psychological support to schizophrenic patients in developing countries. The author introduced one example of the programme developed at the National Mental Hospital in Manila, Philippines. The programme requests all acute ill patients to stay with a family member for evaluation and intensive treatment for three days. This programme enables the education and training of a family member in how to deal with patients after discharge.

In Asian countries, it is not rare for family members to stay with patients during hospitalization. This custom provides an excellent opportunity for training family members in the control of medication, management of side effects, simple techniques of psychosocial rehabilitation, proper attitudes in dealing with patients including the control of expressed emotion, etc.

The above mentioned approaches are possible and more relevant to the developing countries where the extended family system favours these methods.

6.4 Practical application of public health approaches to the delivery of mental health services in developing countries in the Western Pacific Region.

(1) The author used the words humane, cost-effective and culturally relevant as key words to develop community based mental health services in collaboration with mental health workers in developing countries in the region. Also, he applied public health approaches to increase the coverage of scientific psychiatric services in countries with scarce mental health resources. The author summarized the inputs of the regional mental health programmes in the past ten years from 1981-1990 in the following three approaches.

(a) Contribution to the development of national mental health policy formulation

(b) Development of manpower in mental health

(c) Promotion and coordination of research

(2) The regional programme on mental health has made steady progress in the past ten years in terms of the number of activities and the amount of budgetary allocation.

In the past ten years, a series of working groups for policy development, training courses, seminars and workshops have been organized both at regional and national levels. Various advisory services have been provided based on the requests of member states. New research activities including a few multi-centre studies have been initiated and carried out.

During the author's assignment to the Region, active collaboration in the field of mental health were carried out in developing countries such as People's Republic of China, Fiji, the Republic of Korea, Laos, Malaysia, Papua New Guinea, Philippines, Solomon Islands, Tonga, Viet Nam and several island countries in the Pacific.

These activities have greatly influenced the development of community based mental health services in the above mentioned countries in the Western Pacific Region.

(3) The writer discussed the following three conceptual framework and strategies with specific reference to the developing countries.

- Sectorization
- Integration of mental health in general health.
- Consumer involvement in mental health.

These frameworks contributed to broadening the scope of psychiatrists and mental health workers in the region beyond narrow institutional care to community based care.

The author found that some of the principles of sectorization can be adopted or adapted in the developing countries in the Region such as China, Laos and Viet Nam.

In a few Asian developing countries such as Malaysia and the Philippines, the psychiatric training of general physicians and nurses have proved the most effective way to increase the coverages of mental health services in rural area.

6.5 Suggested priority areas

The following are suggested priorities areas for continuous WHO collaboration with Member States:

(1) Setting up of national coordinating groups on mental health in the countries where no such group exists now..

(2) Continuous support and strengthening of national coordinating groups or similar bodies in countries where such groups do exist.

(3) Technical cooperation in the preparation and formulation of mental health legislation.

(4) Technical support for the development of community-based mental health services. Particular importance should be paid to the development of financing systems favouring community based mental health services as opposed to hospital centered services.

(5) Strengthening of psychiatric training of general health workers in the implementation of community based mental health services in national programmes.

(6) Development of mental health programmes in specific mental health and neuroscience areas of public health importance, e.g.. epilepsy, the mentally handicapped, mental health problems of the elderly, etc.

(7) Strengthening of operational research in the region on relevant topics so as to facilitate the introduction of new approaches in the delivery of mental health services, e.g.

- financing systems favouring community care
- culturally relevant mental health legislation
- cost-effectiveness studies of long acting psychotropic medication

(8) Strengthening the network of mental health resource centers in the Region and the facilitation of technology transfer in research and training in mental health and behavioural sciences.

These programmes will surely increase the coverage of scientific psychiatric care and improve the quality of such care in countries and areas with scarce resources in the western Pacific Region.

6.6 Relevance of public health approaches in mental health to developed countries.

In this paper, the author tried to responds the following basic questions which arose over the past ten years during his terms as Regional Adviser in Mental Health and Drug Dependence for the Western Pacific Region of the WHO.

(1) What are the magnitude and nature of the basic needs for mental health services in developing countries?

(2) What are the major constraints on the delivery of mental health services in developing countries?

(3) What are the essential technologies we have in psychiatry to offer to developing countries in the Western Pacific Region?

(4) What should be the appropriate public health strategies and approaches to increase the coverage and to improve the quality of care for mental patients in developing countries?

These questions are extremely simple and naive ones. However, these questions are the most fundamental and universal questions in mental health delivery which are common across national boundaries and socio-cultural differences.

The author considers it important to study these basics because there exist so much confusion and controversy regarding mental health service delivery even in highly developed countries.

The views presented here will apply mostly to developing countries where scarce mental health resources necessitate public health approaches. However, public health perspectives are also useful for developed countries where hospital based mental health services have failed to provide humane, cost-effective, socio-culturally relevant mental health services.(99)(100)

Mental health services should be services for patients and their families. WHO and national leaders in the field of mental health have the responsibility to provide humane, cost-effective and culturally relevant services for them.

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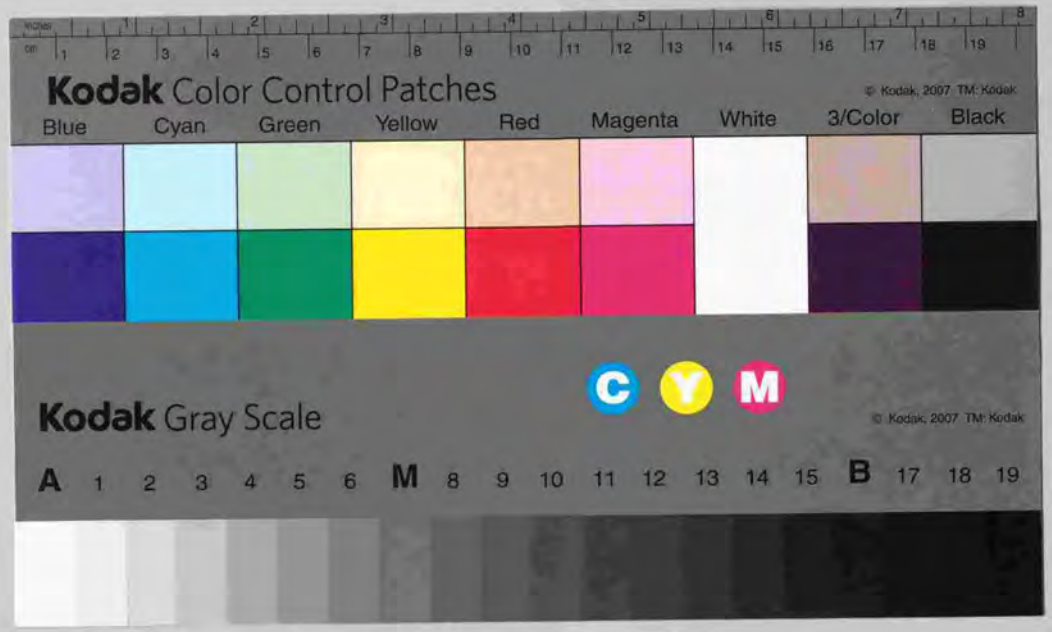
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