

Mental health in the Eastern Mediterranean Region

Reaching the unreachable



**World Health
Organization**

Regional Office for the Eastern Mediterranean



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Mental health in the Eastern Mediterranean Region Reaching the unreached



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Foreword

In the name of God, the Compassionate, the Merciful

The countries that now comprise the Eastern Mediterranean Region of the World Health Organization were some of the earliest to recognize the need for mental health care and to make provision for it: humane mental hospitals were functioning in Baghdad, Cairo, Damascus, Fez and Rey many centuries ago. Thereafter followed a period in which the intellectual vigour, which for centuries had propelled the region to the forefront of humanitarian pursuits, declined. Now, once again our region is on the threshold of a revival, and the past few decades have seen promising developments in innumerable spheres, particularly in the fields of health in general and in mental health.

The same period has seen a sea change in our understanding of human behaviour and mental health, making it possible to approach the subject in a manner worthy of scientific inquiry. Now we are in a position where, using the currently available knowledge and skills, we can prevent many mental disorders, promote mental health and ameliorate the suffering of the afflicted. What is necessary is to develop methods of making the knowledge and skills available to everyone.

In the past 20 years, the countries of the Eastern Mediterranean Region have adopted national programmes of mental health as a method of meeting the needs of their peoples. This has brought in a new era in the provision of mental health care using the primary health care approach. The ultimate goal is to decrease both the stigma of mental illness and the reliance on large institutions for their treatment through community-based care programmes.

This publication brings together the experiences of the 22 countries of the Region in meeting the challenges posed by mental illness. These experiences speak of the value of partnership between countries, between professionals, and between professionals and the people they serve. In addition to the country-level initiatives, a number of regional intercountry activities have taken place with the help of the World Health Organization Regional Office for the Eastern Mediterranean. These have provided an opportunity to learn from each other and have generated know-how and a number of instruments for tackling the issue. However, there is still a long way ahead of us, and most of the needs of the people of the Region in the area of mental health are unmet. Furthermore, these needs are on the rise as a result of the many and often rapid social and economic changes that the Region is going through. We need to plan ahead, and this is precisely the purpose this monograph tries to serve by identifying the goals for the future.

This publication has been made possible by the valuable contributions of many scholars in the field of mental health and the programme managers for mental health in the ministries of health of the countries of the Region, to all of whom I offer my special thanks. I would also like to thank the WHO Department of Mental Health and Substance Abuse, which has contributed both technically and financially to this publication. Thanks are also due to WHO Representatives in the countries of the Region, who have helped in all stages of the intellectual realization of this book, and to the Government of Italy for its financial support to the publication.

In conclusion, I am delighted this publication has become a reality and sincerely hope that it will become a vehicle for sharing, learning and progress towards further realization of the goal of health for all.



Hussein A. Gezairy, MD, FRCS
WHO Regional Director for the Eastern Mediterranean

Preface

Mental health was selected in 2001 as the theme for World Health Day and the subject of the World Health Report. The selection of mental health is a reflection of the changes taking place around us at a rate unmatched in human history. These changes serve to bring into focus the importance of promoting positive mental health on the one hand and instituting measures for prevention of ill health in its entirety on the other. The rapid rate of urbanization in all the countries of the Region is not only putting tremendous strain on physical infrastructures, as can be seen by the growth of sprawling urban slums, but at the same time is placing stress on the social fabric of society. Massive internal migration from the countryside to the city is resulting in the break-up of the extended family system and social institutions, giving way to nuclear families, separation and higher divorce rates, single-parent families, children growing up without parent figure(s), older members of families being left on their own, lack of social cohesion, conflict of value systems, identity crises, increasing rates of unemployment, violence and abuse. High rates of internal movement are matched by similarly high rates of external migration in search of better economic opportunities or for security reasons necessitated by strife and conflict in a number of countries in the Region. This results not only in the social consequences mentioned previously but has repercussions for the émigré population, mostly young adults, and for the host country. Increasing numbers of people in the Region are now entering the age of risk for development of mental disorders—adolescence/early adulthood and old age; and existing conditions of social and physical strife, underpinned by high rates of poverty, provide fertile grounds for an upsurge in mental health problems and their consequences, such as suicide, substance dependence,

sexually transmitted diseases, AIDS and hepatitis. The World Bank report of 1993, the world mental health report presented to the United Nations in 1995, the global burden of disease report in 1996 and the US Surgeon-General's report in 1999 have shown that mental ill health is responsible for more than a tenth of the total burden of disease globally, projected to rise to 15% by 2020; suicide is among the top 10 causes of mortality-related burden globally; five of the top ten causes of disability worldwide are mental health problems; and depressive illness is projected be the second biggest cause of disease burden by 2020. Numerous studies undertaken globally and in the countries of the Eastern Mediterranean Region indicate that a high percentage of all who seek help in any health facility suffer only from a mental health related problem. These problems usually go undiagnosed, and the result is unnecessary load on already overburdened general health facilities.

At the same time, there are studies, experiences and programmes that show mental health action is possible and proper systems of care can be developed to successfully address many of mental health needs. Despite this, the treatment gaps for mental illnesses in developing countries, including the countries of the Region are truly horrifying: 95% for depression, 80% for schizophrenia and 60%–98% for epilepsy. At the global level, the necessity of attention to mental health is emphasized in the form of a number of resolutions of the United Nations General Assembly and World Health Assembly. In May 1995 the Secretary-General said “to secure mental health for the people of the world must be one of the objectives of the United Nations in its second half century.... Our objective is to promote the mental health and well-being of all the inhabitants of the planet. Let us therefore respond to this world mental health report not simply by blessing it; let us take its recommendations and act upon them”.

At the regional level, in addition to a number of resolutions of the Regional Committee over the years, a special ministerial declaration was issued in Teheran in 1997 that pointed to the importance of taking concrete steps to improve mental health (Annex 1). This was followed up by the following 10-point programme for action for the Region.

1. Comprehensive psychiatric services for early identification and care
2. Integration of mental health within primary health care

3. Provision of mental health skills for all professionals
4. Development of services for “crisis intervention” in the community
5. Development of “school mental health”
6. Development of “parenting skills training”
7. Programmes for urban populations such as adding a mental health component to “healthy city” projects
8. “Lifestyle” and “stress management” programmes
9. Public mental health education
10. Using the resources of religion, culture and spiritual life

The past 20 years of commitment by health professionals, planners and people of the Region towards improvement of mental health have been unprecedented. This publication charts the progress made in the provision of mental health care in the countries of the Eastern Mediterranean Region of the World Health Organization. Its preparation has been a challenging and fulfilling experience. We are not the first to advocate on behalf of “reaching the unreached”. Mental health remains a neglected area of public health. People who suffer from mental ill health are among the most vulnerable in society, often from the poorest segments in society. They are the “unreached”.

The methodology for preparing the material for each of the countries was as follows. Information about each of the countries was available from intercountry meetings held every two years. This information was then supplemented with the reports of consultants and country focal points. In addition a questionnaire (Annex 2) was circulated. Thus, the final information is a product of multiple sources. Some of the data refer to different time periods, pointing to the need for developing a mechanism at regional and country levels to continuously update the available information in a manner which could also remove some of the quantitative and qualitative differences discernible in the section on individual countries; however, some of the differences reflect the stages of development of different mental health programmes. We hope this will serve as the first step in this direction in the Region.

The general health and demographic statistics are taken from the last available data provided to the Regional Office by the Member States. These data may not be the most accurate but there is no basis for thinking that other

sources of data are more accurate. The collection of data for this monograph started before the global ATLAS project and the questionnaires used were different. The Regional Office and WHO headquarters collaborated in data collection from Member States of the Eastern Mediterranean Region for ATLAS. The information from the WHO Mental Health Atlas, 2005 has been given at the end of each country profile. This allows for an update of the information along with the historical development of mental health in each of the countries.

The monograph is organized into three sections. Part 1 covers the philosophy and components of mental health programmes. The contribution of the WHO programme Nations for Mental Health is also outlined in this part. Part 2 covers the experiences of the countries of the Region; each country has a section on general health and mental health. The overall picture, though varied, shows the potential for bringing about a meaningful change in making mental health services available and accessible for people of the Region. A quantum shift from institutional to community-based care and from mental illness to mental health is discernible. Part 3 discusses the key issues in provision of mental health care today and tries to identify the areas for future work, at the regional level. Annexes support the other sections and the work as a whole.

We would like to extend our most sincere thanks to Dr Hussain A. Gezairy, WHO Regional Director for the Eastern Mediterranean, for his support for this work. His guidance, along with the advice and support of Dr M.H. Khayat, Senior Policy Adviser, Dr Mohammad Abdi Jama, present Deputy Regional Director and his predecessor Dr Abdulaziz Saleh, Dr Ghada Hafez and Dr Anna Verster both former Directors of the Division of Health Protection and Promotion, was instrumental in finishing this important work. Also, this work would not have been possible without the help of mental health professionals and the focal points of mental health programmes of the countries of the Region. Our thanks to all of them.

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Vacat

Part 1

**Strengthening mental health
programmes**

vacat

Chapter 1

Introduction

There is a common misconception about the meaning of the term “mental health care”. A large number of people, including many health professionals, regard it as nothing more than a branch of medicine that deals with the treatment of the seriously mentally ill or, in lay terms, a speciality dealing only with “mad people”. This view of mental health is erroneous and limiting. In fact a comprehensive mental health programme deals with serious mental health problems as well as with problems of daily living which affect health, such as tension, worry and stress, but it does not stop there. It also seeks to protect and promote mental health in all its dimensions, ranging across human emotions, attitudes, perceptions, thoughts and behaviour. It is in this spirit that WHO’s Constitution conceives health as “a state of complete physical, *mental*, and *social* well-being and not merely the absence of disease or infirmity” [*emphasis added*] [1].

There are several popular misconceptions about neuropsychiatric illnesses which need to be corrected:

- neuropsychiatric illnesses are not common
- neuropsychiatric illnesses do not form a significant burden on individuals, the family or society
- neuropsychiatric illnesses cannot be treated
- interventions are expensive and require highly trained personnel
- primary health care personnel do not have a role to play in the care of the mentally ill.

In fact mental illnesses are as common in developing countries as in the more developed countries and cause severe depletion of social capital.

About 450 million people worldwide are believed to suffer from neurotic, stress-related and somatoform disorders. A further 200 million suffer from mood disorders, such as chronic depression and manic–depressive illness. Mental retardation affects some 83 million people, epilepsy 30 million, dementia 22 million and schizophrenia 16 million. An estimated one million people committed suicide in 1999 and a further 10–20 million people attempted suicide. Depressive disorders account for 20%–35% of all deaths by suicide. There are few human conditions which cause more anguish to the individual, to the family and the community than mental illness [2].

The portion of the global burden of disease attributable to neuropsychiatric disorders is expected to rise from 10.5% in 1996 to 15% by 2020. The rise will be particularly sharp in developing countries, primarily due to the projected increase in the number of individuals entering the age of risk for the onset of these disorders [2].

In 1996 the United States of America spent more than US\$ 99 billion in direct costs for the treatment of mental illnesses, substance abuse and dementias while the indirect costs imposed by mental illness in 1990 were estimated to amount to US\$ 79 billion [2].

Improving treatment rates will reduce disability and health care costs and will improve economic and social productivity. At a global level it has been estimated that the burden of disease attributable to major depression could be reduced by more than 50% if all individuals with depression were treated. Although many effective interventions exist, there is a wide gap between their availability and widespread implementation. Even in best-case scenarios (in established market economies with well developed health systems), it has been estimated that only 35% of persons suffering from depression receive treatment. In other countries, such as sub-Saharan Africa and China, treatment rates for depression are as low as 5%. In India, treatment rates of 20% for schizophrenia and epilepsy contrast with the 80% treatment rates for the same disorders in countries with established market economies. Besides defined neuropsychiatric illness, an additional burden is incurred because of psychosocial problems experienced by vulnerable groups, such as indigenous peoples, those exposed to disasters, displaced persons (there are more than 20 million displaced persons worldwide), people living in absolute and relative poverty, and those in difficult conditions as a result of chronic diseases such as HIV/AIDS [2].

The impact of mental disorders on communities is large and manifold. There is the cost of providing care, the loss of productivity, and some legal problems (including violence) associated with some mental disorders, though violence is caused much more often by “normal” people than by individuals with mental disorders. One specific variety of burdens is the health burden. This has traditionally been measured in national and international health statistics only in terms of incidence/prevalence and mortality. While these indices are well suited to acute diseases that either cause death or result in full recovery, their use for chronic and disabling diseases poses serious limitations. This is particularly true for mental and behavioural disorders, which more often cause disability than premature death. One way to account for the chronicity of disorders and the disability caused by them is the Global Burden of Disease (GBD) methodology. In the original estimates developed for 1990, mental and neurological disorders accounted for 10.5% of the total DALYs lost due to all diseases and injuries. This figure demonstrated for the first time the high burden due to these disorders. The estimate for 2000 is 12.3% for DALYs. Three neuropsychiatric conditions rank in the top twenty leading causes of DALYs for all ages, and six in the age group 15–44. In the calculation of DALYs, recent estimates from Australia based on detailed methods and different data sources have confirmed mental disorders as the leading cause of disability burden. From an analysis of trends, it is evident that this burden will increase rapidly in the future. Projections indicate that it will increase to 15% in the year 2020 [3].

Source [2]

The essentials of mental health care are simple principles, many of which have been taught by religions and enshrined in humanitarian and ethical values all over the world throughout human history. For instance, caring, showing concern, consoling and many similar attributes are helpful in dealing with a human being in distress or suffering from a disease, yet such basic mental health care strategies are not given prominence in the training of health personnel. The most recent international guidelines are the Principles for Policy on Mental Health (United Nations, December 1991, Annex 3). Furthermore, modern medical advances have provided us with medicaments, treatment modalities and techniques which make treatment of

neuropsychiatric illnesses possible and practicable. Models of care that are both inexpensive and effective are available. These models are employed at the primary health care level for the treatment of common neuropsychiatric illnesses, such as psychosis, epilepsy and depression in a number of countries in the Eastern Mediterranean Region—Bahrain, Islamic Republic of Iran, and Pakistan, for example [4,5,6].

But the case for adequate provision of mental health care does not rest only on prevalence of or disability caused by neuropsychiatric illnesses. There is a growing awareness that many health and social problems, for example those related to alcohol and drug abuse, injuries, violence, suicide and delinquency among youth, may be indicative of an underlying psychosocial problem and thus are the concern of mental health programmes. Many of the most serious health problems and common causes of death in the world, such as heart disease, cancer, accidents and infections including HIV/AIDS, could be considerably reduced if people could be persuaded to adopt healthier lifestyles, for example by stopping or reducing the consumption of alcohol and tobacco, ensuring safe sexual practices compatible with the acceptable social and cultural norms or by engaging in regular physical exercise.

It should also be noted that many failures in health care are not due to any lack of technological solutions but to an inability to apply the available solutions, often resulting from an insufficient understanding of sociocultural factors impinging on human behaviour; for example, schistosomiasis and diarrhoeal diseases can be prevented by changing people's behaviour. Similarly, we have the methods of family planning, yet we lack the means of persuading people to use them. The current pandemic of acquired immunodeficiency syndrome (AIDS) is a glaring example of how inadequate our technological response can be when behavioural variables are not factored in properly. One could easily list many similar examples. They all show that without paying adequate attention to psychosocial and behavioural factors, better health is unlikely to be achieved [2].

In summary, mental health care programmes are not limited to the treatment of serious mental illnesses in an institutional setting. They deal with the whole range of psychosocial and behavioural factors affecting both health and disease. A mental health care programme must be incorporated

into primary health care focusing on promotion of mental health and the prevention of mental illnesses in harmony with local sociocultural conditions and traditions. An integrated, well-structured mental health component can play a vital role in the success of all health programmes. These are the reasons behind the recommendation of the WHO Expert Committee on Mental Health [7,8]: “Governments are urged to recognize mental disorders as problems of high priority for the individual, for the community, and for national development.”

Chapter 2

Historical aspects

Activities of the Regional Office 1949–2000

Mental health has been an important part of the understanding of health from the beginnings of the World Health Organization (WHO). The definition of health in the preamble to the Constitution of WHO recognizes the important place of mental well-being: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” Further, the “extension to all peoples of the benefits of medical, psychological, and related knowledge is essential to the fullest attainment of health”. One of the functions of WHO is to “foster activities in the field of mental health, especially those affecting the harmony of human relations” [1].

The [First World Health] Assembly established a programme based mainly on the recommendations of the Interim Commission, and, as a first step towards future policy, it grouped the various subjects in categories of importance. Malaria, maternal and child health, tuberculosis, venereal diseases, nutrition and environmental sanitation were assigned to a “top priority” class; second priority was given to public health administration; third, to parasitic diseases; fourth, to viral diseases; and fifth, to *mental health* [emphasis added]. Sixth priority was accorded to a somewhat varied group of other activities [9].

Mental health care has been an important area of activity in the Regional Office since its establishment in 1949. One of the earliest references to mental health was in the Third Session of the Regional Committee for the Eastern Mediterranean in September 1950, where the Committee noted the “provisions made for activities related to typhus and relapsing fever, bilharziasis, cholera, rabies, leprosy, nutrition, maternal and child health and *mental health*” [emphasis added] [9].

In 1953, surveys about mental health problems were carried out in Egypt, Iraq, Lebanon, Sudan, Syrian Arab Republic and Jordan. In the same year, a mental health seminar was held in Beirut in which 20 participants from eight countries participated [9].

In 1969, Dr A.H. Taba, then WHO Regional Director for the Eastern Mediterranean, reviewing the 20 years of work of the Regional Office, noted that the “Eastern Mediterranean Region is a tradition-bound area abruptly thrust into the main stream of modern life resulting in a rising tide of organic and mental stresses linked with overnight social changes” [9].

In his report at the Alma-Ata conference he further said:

Hospitals record a growing flow of psychiatric patients from urbanized areas, and the emotional aspects and mental hazards involved are increasingly being investigated along medico-social lines. The traumatic encounter of youths with urban values and the hasty settlement of nomads are already features of concern to psychiatrists and public health planners. But psychiatric care everywhere, whether at hospitals or at outpatient clinics is handicapped by an acute shortage of well-trained workers, which adds much to WHO commitments [10].

In the 1970s, activities in the mental health field focused on country-level evaluation of mental health services available in the countries of the Region, by the then regional adviser on mental health, as well as by external consultants to Ethiopia, Iran, Kuwait, Lebanon, Qatar, Saudi Arabia and Sudan. An interregional seminar on the organization of mental health services in developing countries was held in Addis Ababa, Ethiopia, in 1973, which provided a good medium for discussing the organization of mental health services and drawing up relevant recommendations [7,8].

Country activities

A number of mental health activities that took place in the countries of the Region between 1970 and 1980 were extremely important as they set in motion the process of integration of mental health care within the primary health care system during the 1980s.

In Iran, the founding of the Society for Rehabilitation of the Disabled, planning for community mental health, the initiation of a nationwide mental health epidemiological survey with designation of geographic areas for provision of services (catchment areas), and the recommendation by a WHO consultant for establishment of a central policy-making committee for more effective planning, coordination and training in mental health (November 1973) set the scene for development of the Iranian national mental health programme and integration of mental health care within primary health care during the 1980s and 1990s.

In Lebanon, mental health care activities targeted improvement of the organization and administration of mental health services, strengthening of the psychiatric nurses training programme and drawing up of a programme for an intercountry psychiatric nursing course for nursing tutors. A WHO consultant in psychiatric nursing advised the establishment of a general administrative department, including a nursing unit, for the effective organization and coordination of psychiatric services in both general hospitals and outpatient clinics (1973).

In Pakistan the 1970s marked the setting-up of psychiatric units in general hospitals, development of postgraduate training programmes for doctors and psychologists, and of community-based rehabilitative services and halfway houses such as Fountain House, and the involvement of nongovernmental organizations in mental health care.

This decade also was marked by a major WHO global initiative to integrate mental health within primary health care, namely, the launching of the WHO collaborative project on strategies for extending mental health care. This seven-country project, spread over six years (1975–81), studied the feasibility of integrating mental health care within the primary health care system. Sudan (Senouris) was one of the four countries selected in the first phase, and Egypt (Fayyum) was included in 1977 as part of a second phase (three countries). The project developed epidemiological tools and

training materials needed for achieving the objective of demonstrating the need and feasibility of the primary mental health care approach.

All of the above developments prepared the ground for the development of national programmes of mental health care in the 1980s. The period 1980–98 could be called the era of national programmes of mental health care. During this period significant progress was made in identifying the goals of mental health care programmes, as well as in developing strategic, indigenous approaches for realizing these goals. One striking feature was intercountry cooperation fostered through regional intercountry meetings, symposia, workshops and consultations at Amman (1983), Damascus (1985), Isfahan (1989), Nicosia (1991), Islamabad (1993), Casablanca (1995), Teheran (1997), Alexandria (1999) and Cairo (2003). These were organized in order to review the progress of the programme as well as to strengthen individual components of national programmes of mental health. In the area of substance abuse the most important step was the formation of the Regional Advisory Panel on Drug Abuse (RAPID). The panel has had four meetings (Cairo 2002), Teheran (2003), Cairo (2004) and Cairo (2005), and developed a comprehensive strategy, the principal directions of which were approved by the Regional Committee for the Eastern Mediterranean in 2005 (Annex 4). All these activities were supported by visits of WHO consultants, fellowships and country activities. The overall result of these efforts has been enhanced awareness of mental health issues in the Region.

Chapter 3

Overview of mental health in the countries of the Region

Recent years have seen significant changes in the field of mental health in the countries of the Region. The stigma attached to neuropsychiatric illnesses is diminishing, and people are more openly coming for treatment to modern psychiatric services. Psychiatric services, which were earlier totally confined to a few large mental hospitals, are now gradually being replaced by psychiatric units with both inpatient and outpatient facilities in general hospitals. In some countries, the process of decentralization has been taken still further, and psychiatric services are being provided at district hospitals and smaller peripheral units, along with other general health services. In a number of countries, there is now a separate senior officer in the ministry of health designated to look after the mental health activities in the country. Many countries have developed specific national mental health policies and programmes. Training programmes in mental health for general practitioners, non-physicians and health personnel working at primary health care level have started in a large number of countries as a part of in-service skills enhancement programmes.

Although a majority of the countries of the Region have agreed in principle to integrate mental health into the primary health care delivery system, implementation so far has been limited. The reasons are manifold.

The shortage of qualified mental health professionals in almost all the countries of the Region is well known. For example, facilities for training leading to a postgraduate qualification in psychiatry are available only in a

small number of countries: Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Oman, Pakistan, Saudi Arabia and Sudan. Training facilities for clinical psychology at different levels are at present limited only to Egypt, Islamic Republic of Iran, Iraq and Pakistan, while psychiatric nursing training is available only in Bahrain, Egypt, Pakistan and Islamic Republic of Iran. While training programmes in mental health for in-service doctors have started in many countries, the teaching of mental health and behavioural sciences in the undergraduate medical curriculum continues to be inadequate. The poor condition of medical records of the present mental health services in some countries is also a serious shortcoming, hampering the development of national programmes of mental health.

A negative attitude toward mental health is often encountered among health planners and administrators, possibly stemming from a lack of knowledge about recent developments in the field of mental health because of little collaboration between university departments and ministries of health. For example, a large number of health administrators are still not aware that neuropsychiatric illnesses and psychosocial problems are prevalent in their countries and contribute to a large proportion of disability in the community and that it is possible now to adequately prevent, treat and manage many of these conditions in a cost-effective manner (Annex 5).

Ambiguity over the roles of the members of the mental health care team—the psychiatrist, the clinical psychologist, the psychiatric social worker, the psychiatric nurse, and so on—is an additional problem faced by many countries, possibly because many mental health professionals received their initial training in the developed world and often transfer prejudices and interprofessional rivalries from these countries to their own countries.

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 [8].

The provision of mental health services is further hampered by the existence of old and outdated mental health laws in some countries of the Region, which do not have adequate provisions for treatment, care and rehabilitation of persons suffering from neuropsychiatric illnesses, at the same time respecting human and civil rights.

In conclusion, it would appear that safeguarding mental health in increasingly fractured societies, where many of the previous cultural and social support systems (such as the family or organized religion) are weakening, is an awesome challenge reaching far beyond the realm of health care systems. However, the time is now ripe for integrating elements of prevention and treatment of neuropsychiatric illnesses in primary health care while incorporating promotion of mental health in the national development policies as a logical step towards the goal of health for all .

Chapter 4

Developing programmes of mental health at country level

The need for national programmes of mental health

All countries of the Region have developed national strategies to translate the concept of health for all into reality. However, in most of these national documents, mental health is not included, in spite of its recognized importance. One way to redress this situation is to have a national programme of mental health involving all the stakeholders at national and sub-national levels integrated into the health and developmental strategies and plans of each country [11–15]

With the emergence of specific plans of action for mental health at country level opportunities for intracountry as well as intercountry technical cooperation would greatly improve on the one hand, and the acquisition of extrabudgetary resources to support country programmes would be facilitated on the other.

Steps for the development of national programmes of mental health

The initiative for a national mental health programme can come from the political level, from health professionals and administrators or as a result of strong public opinion. Mental health professionals can influence it at each

level. They can help to start the process by promoting the need for a plan of action; by lobbying political authority, health planners and administrators; by mobilizing public opinion through the press, television and other media; and by organizing national mental health groups incorporating members of all related sectors.

Once enough momentum has been generated, a mental health action group should be created, and entrusted with the task of formulating a document on the proposed programme and plan of action. Such a document needs to be reviewed at successive stages by mental health professionals, health administrators and planners, and experts in other sectors such as social services, education, law, nongovernmental organizations and university research bodies, before final adoption by the ministry of health.

Development of national programmes of mental health means formulating a policy and translating it into a plan of action. There are a number of steps that are involved in this process [11,13].

Policy

A policy provides broad guidelines and the framework for a plan of action. Policy stems from the basic principles governing a country as contained in that country's constitution, international agreements and established codes of behaviour. A national policy can be developed out of a number of sources such as:

- legislation affecting the general public
- previous activities to promote health
- programmes of other social sectors
- religious and other teachings relevant to health and well-being
- current health practices
- the harmony between existing policies and the programmes of the various social sectors.

Formulation of a document on a national mental health programme and preparing a plan of action

There is no one way to prepare a national programme of mental health. Every country has its own historical background, set of health priorities and constraints in resources. What follows is a broad consensus

statement on how this goal can be reached. This is based on discussions at different intercountry meetings held during the past 23 years (Annex 6).

The current mental health situation in the country

Data on mental illnesses, including results of prevalence and incidence surveys, if available, should be collected and annual statistics from mental and general hospitals should be included. An assessment of existing resources—hospital beds, mental health human resources (numbers of psychiatrists, doctors, nurses, social workers, psychologists, etc.), existing training facilities, including medical schools, health institutions and specialist training facilities, should be reviewed. Current coverage by the listed services, as well as gaps, and the needs in special areas, such as child mental health, mental retardation, school health, drug dependence, mental health of the elderly, mentally ill offenders and vagrants, should be surveyed. Existence of any special activities on promotion of mental health and scope for intersectoral collaboration in the country should be identified.

Barriers

While preparing a national programme of mental health, it is equally important to identify main barriers, which can come in the way of implementation, such as organizational, professional and developmental barriers and barriers related to primary health care.

Organizational barriers include:

- lack of appreciation by policy-makers and senior health administrators of the nature and extent of mental health needs in the community
- lack of a focal point responsible for mental health in the ministry of health
- no reference to mental health in national policies
- absence of mental health in the list of national health priorities
- lack of mechanisms for intersectoral collaboration.

Professional barriers include:

- shortage of trained psychiatrists, clinical psychologists, psychiatric social workers and psychiatric nurses
- low prestige of psychiatry as a speciality

- mental health professionals working predominantly in institutional settings and not being supportive of the national programme
 - lack of public-health community-oriented mental health professionals. Developmental barriers include:
 - resource constraints in terms of money and technical know-how
 - limited funds available for the general health sector
 - lack of supportive welfare structure for the total care of the mentally ill.
- Barriers at primary health care level include:
- non-inclusion of mental health in the curricula of various categories of health personnel
 - general lack of resources for the care of the mentally ill as reflected in the non-availability of essential drugs
 - lack of database on mental health problems at primary health care level
 - poor intersectoral coordination at the periphery.

Objectives of the programme

Some countries have chosen the provision of minimum mental health care for all. Other countries have emphasized the need to enhance community participation and self-help in mental health programmes or to encourage a wider application of mental health knowledge and skills for psychosocial problems.

A national mental health programme should include the following broad objectives:

- promotion of mental health
- prevention of mental disorders
- treatment and rehabilitation of the mentally ill and drug dependent
- improvement of functioning of the general health services
- contribution to overall socioeconomic development
- enhancing quality of life.

Promotion of mental health means sensitizing the individual, the community and society, as a whole about the role positive mental health can play in every aspect of life be it economic, social or political.

Cost-effective preventive interventions for a significant number of neuropsychiatric and psychosocial problems are now available (Annex 5). It has been estimated that at least half of all such disorders in developing countries could be prevented. Most of the preventive interventions however would have to be undertaken by general health services and social sectors. Similarly treatment of neuropsychiatric illnesses is possible and practicable using models for providing mental health care through trained primary health care personnel. These models have been developed and evaluated in countries of the Region [4–6].

The current practice of medicine in many countries is becoming overreliant on technology. Psychological skills, which could render health care personnel more efficient and more satisfied with their work, are not taught in most countries. As a result, the population's satisfaction with health care is decreasing, in spite of increased expenditure on provision of health services. Mental health and behavioural sciences can provide the knowledge and skills necessary to overcome these problems. It is the task of mental health programmes to ensure that this occurs at all levels of health care, involving all categories of health staff.

Similarly, but on a different plane, socioeconomic development often leads to situations of major psychosocial impact. Untoward consequences of developmental projects can often be avoided. Comprehensive mental health programmes should involve those responsible for planning and economic development and provide knowledge, which can render social change, and development more harmonious with the expectations and psychological needs of people; similarly, all these tasks require collaboration between various social sectors and different professional disciplines. More important, however, they require a change in the perception, motivation and attitude of professionals dealing with the design and implementation of mental health programmes.

General principles for organization of services

For the organization of mental health services at primary health care level, general guiding principles should be to:

- provide total coverage of the population

Countries in the Region experience a multitude of psychosocial stressors consequent to economic insecurity, poverty, internal troubles, and armed conflict. Environmental catastrophes, such as earthquakes, droughts or floods that lead to human displacement, add to the burden. Social networks, e.g. those provided by family and friends and other features of community life, which play an important protective role, are in danger of disappearing in many countries. Recent trends towards community disintegration and breakdown leave populations more vulnerable. For example, in many countries where the father (or both parents) migrates in search of labour or for other reasons, there is an increasing tendency towards family breakdown. This affects the upbringing of children and weakens ties between generations, thus preparing the ground for other health problems.

High-risk behaviour of young people, such as experimenting with drugs and alcohol, sexual promiscuity and reckless driving all tend to become more frequent when family cohesion is weakened. Furthermore, the presence in several countries of a sizeable expatriate population, with a skewed age–sex composition and its own special lifestyle, speaking a different language and with a different religious and cultural background, all cause specific psychosocial problems in recipient countries. [16]

- integrate basic mental health services in the primary health care setting and provide services by non-specialists who have appropriate training in mental health in order to carry out appropriate tasks
- provide essential drugs
- provide an adequate referral system
- strengthen specialist services
- provide linkage with community development.

Activities

The draft document should specify both short-term and long-term targets and especially list activities planned to be carried out in the first 3–5 years. The activities should be further divided into administration, services, training, promotional and preventive activities, etc. A division of labour between what will be primarily carried out by the health sector and what is

to be taken up by the other sectors can also be included. For activities in the field of prevention of mental disorders and promotion of mental health, perhaps the most important step is intersectoral collaboration.

Coordination

It is important to develop specific mechanisms for intersectoral coordination. For example, it will be useful to have a focal point in the ministry of health and a national committee (incorporating health administrators and mental health specialists, with representatives from other sectors, such as education and social services).

Monitoring and evaluation

Mechanisms for monitoring and evaluation should be built into the programme.

Follow-up steps for finalizing a mental health national programme

Preparation of a document on a proposed national mental health policy and programme is a very important first step, but only one step on the road to developing a comprehensive and reliable programme for mental health care in a country. In many ways a mental health programme is a continuous process of evolution, which keeps on growing and changing with the needs of society. Experiences during the past 15 years in the countries of the Eastern Mediterranean Region suggest that the following steps are very helpful in taking the programme further once the initial document has been prepared.

Obtaining a national consensus on the programme

This can be best achieved by organizing a multisectoral national workshop to discuss and adopt the previously prepared document on the national programme of mental health. Thirty to fifty participants should be invited to this workshop, which would be normally organized by the ministry of health. They should include the representatives from the following sectors:

- leading mental health specialists in the country, such as psychiatrists, clinical psychologists, psychiatric social workers, psychiatric nurses and occupational therapists
- representatives of the ministry of health, especially those dealing with health planning, prevention of diseases, primary health care, and so forth
- other leading medical specialists, such as family physicians, paediatricians and especially teachers from medical schools
- representatives of the ministries of education, social welfare, law and justice, police, youth affairs and religion
- representatives of important nongovernmental organizations, religious and community leaders, women's organizations
- press and other media.

Once such a multi-sectoral group has reached a consensus, the final document and recommendations are submitted to the ministry of health with copies to other involved ministries. Organization of such a workshop can also generate public awareness enhancing the place of mental health in the community.

Adoption of the national programme of mental health by the Ministry of Health

In most of the countries of the Eastern Mediterranean Region, national programmes of mental health have been adopted as follows:

- approval of the plan of action and its inclusion in the national plan of health
- allotment of an adequate budget for activities of the programme
- establishment of a separate section in the ministry of health to monitor and implement the programme
- establishment of a multisectoral (interministerial) national coordination group.

Steps in developing a national mental health programme

- Policy and situation analysis
 - Identification of programme components
 - Preparation of a draft document containing the Plan of action with short and long-term goals and job description for each level of personnel and sectors
 - Obtaining national consensus
 - Adoption by the ministry of health
-

Chapter 5

Development of services for treatment and rehabilitation in primary health care

Primary health care in the Region

Most of the countries in the Eastern Mediterranean Region have vast rural populations, which have very little access to modern health services for the treatment and rehabilitation of neuropsychiatric disorders. Almost all the countries have adopted the primary health care approach to meet the health needs of their populations. In recent years Afghanistan, Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Libyan Arab Republic, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen have tried to introduce mental health at the primary health care level. In this chapter, organization of such services is discussed in further detail.

The general principle of the primary health care approach

Primary health care is essentially health care made universally accessible to individuals and families by means acceptable to them, through their full participation and at a cost that the communities and country can afford. It forms an integral part of a country's health system, of which it is

the nucleus, and part of the overall social and economic development of the country [17]. The new approach, as an alternative to institutionalized care, requires that mental health programmes be integrated within the primary health care structure in its promotive, preventive and curative dimensions, ensuring development of mental health services in harmony with the health and social policies of the country [18].

Support mechanisms required for the provision of services for the treatment of persons suffering from neuropsychiatric illnesses

Experience has shown that the following support mechanisms are essential for the success of the mental health services at primary health care level:

- adequate training in mental health care of doctors and all categories of health personnel working in the primary health care team
- mental health orientation of health administrators and planners
- provision of regular supplies of essential neuropsychiatric drugs
- adequate records and information system at primary health care and referral levels
- adequate referral system with support and supervision for the primary health care team
- involvement and support of the families and the community in which mental health services are being established.

Mental health training of all health staff

The whole issue of mental health training is dealt with separately in Chapters 6 and 7. Suggested tasks for different categories of personnel are given in Annex 7.

Involvement of health administrators in mental health programmes

The effective implementation of any health programme becomes difficult if adequate management support is not available. Health administrators in the field, being a government's instruments for field management, supervision and implementation of national health

programmes, can play a pivotal role in the integration of mental health into primary health care, providing very important leadership at the intermediate level. They mediate between the community, the policy-maker and the politician, coordinate the efforts of planners, professionals and the recipients of services, namely the community. At present, many health administrators have negative attitudes towards mental health. A very important aspect of a national mental health programme is to bring about a change in administrators' opinion. They must be informed of the prevalence of mental disorders, their burden on the family and community, the value of early intervention and the cost-benefits of mental health care (appropriate to the area, region or country). The broad shift has to be from mortality-oriented epidemiology to morbidity and quality of life.

Lack of understanding and support from health administrators can give rise to serious difficulties in the implementation of mental health programmes, including the formulation of legislation for strengthening and regulating mental health services; recruitment and effective use of qualified human resources; establishment of national, regional and district mental health services; equitable distribution of minimal mental health resources to the urban and rural populations; and needs assessment, monitoring and evaluation.

Thus, health administrators are key players in national mental health programmes and they must be made aware of the value of mental health services. If properly motivated, they can help to allocate resources at local level, provide leadership and managerial support, and be key figures for linkages between specialized resource centres and the health-care delivery system. They can ensure incorporation of mental health care in the educational activities of general health care and become agents for intersectoral collaboration.

It must be explained to health administrators that a mental health programme is not restricted to the treatment of neuropsychiatric illnesses—knowledge of and skills in mental health can also improve the functioning of general health services.

Active and continuous efforts should be made to develop regular dialogue with health administrators at all levels. This should be done in terms of sharing simple information about mental health and the overall

effects of such a programme on health without excessive financial demands. This can also be supported by holding orientation courses for them as has been done in a number of countries (such as Islamic Republic of Iran and Pakistan) [3–5,20].

The scope of such courses should include:

- need and rationale for the integration of mental health into general health services at the primary health care level
- outline of an agreed national mental health programme
- relevant epidemiological data regarding mental health, preferably from the same country, with a description of the social and public health consequences of mental illness
- demonstration of simple technology for training of health staff, including training materials such as manuals
- inviting health administrators' suggestions on already drawn-up plans of action followed by active discussion on areas of collaboration
- demonstration of an effective mental health care programme in a primary health care setting using the existing health services.

Essential neuropsychiatric drugs for mental health services

Essential drugs are those that satisfy the health care needs of the majority of the population. They should therefore be available at all times in adequate amounts and in appropriate dosage forms. Provision of neuropsychiatric drugs, which can be selected from the WHO list of essential drugs for neuropsychiatric disorders appropriate to local needs, is an essential requirement for the implementation of national mental health programmes [19].

Before deciding on the essential neuropsychiatric drugs for a mental health programme, it is important that:

- priority mental disorders to be managed at primary health care level and at referral centres are identified
- the necessary tasks and training of personnel within the existing health infrastructure are defined
- a coordination, evaluation, and monitoring mechanism is developed.

There should be clear job/task descriptions for doctors and other health personnel. It should also be explained that not all neuropsychiatric

disorders require drugs in their management and the role of understanding, support, counselling and psychosocial intervention must be emphasized in the training programme. The range of non-pharmacological interventions includes relaxation, problem-solving skills, developing and maintaining social support networks, changing irrational thinking and lifestyles.

All health personnel concerned must be trained on the use of correct standardized dosage of selected essential drugs for different age groups, as well as duration of treatment, precautions, and possible side effects and their management [18].

The selection of drugs for primary health care must be determined at country level since the priorities; health infrastructure, training and responsibilities of personnel and legal issues vary considerably in countries of the Region. In some countries, such as Egypt, only a qualified medical officer may prescribe psychotropic drugs. In other countries, such as Pakistan and Yemen, the prescription of a limited range of drugs is accepted policy at the level of medical assistant. These differences are a reflection of the wider public health policies of those countries.

Experience globally and in the Eastern Mediterranean Region has shown that it is possible to identify a limited range of drugs for use at different levels of mental health care. Annex 8 contains a list of approved essential neuropsychiatric drugs in primary health care.

Apart from their purely therapeutic benefits, an adequate and regular supply of drugs increases the use of health services as a whole, enhances motivation and morale of the staff and consequently improves the functioning of health delivery system [20].

It is important that a coordinating committee on essential drugs at the national or provincial level meet on a regular basis in order to review and update, at regular intervals, the standard treatment schedules and guidelines for clinical diagnosis, to assess the adequacy of clinical diagnosis and management, to evaluate the system of supply, distribution and drug use, to engage in curriculum development and training of primary health care personnel in clinical diagnosis and patient management, to analyse the standardized records, and to ensure that the service is effective and that drugs are being used appropriately [21].

Information and recording for mental health services in primary health care

It is well recognized that for a programme of integration of mental health services into primary health care to be successful, a simple and appropriate recording and information system is vital. Such records should be aimed towards clearly defined goals and regularly analysed, with feedback provided to health staff. Similarly, for the monitoring of the programme, development of suitable indicators is essential [18].

Need for an information system in mental health

Mental health professionals in countries of the Eastern Mediterranean Region have the dual responsibility of initiating innovative mental health care programmes and demonstrating their effectiveness and appropriateness. In order to achieve this, reliable data have to be provided to answer the following questions:

- What are the diagnostic categories of patients benefiting from provision of mental health services at primary health care level?
- What are the pathways to care taken by people suffering from neuropsychiatric illnesses?
- What are the barriers to use of the available facilities?
- What is the quality of care provided by non-specialist personnel?
- What are the difficulties experienced by non-specialists in providing care?
- Are the referral channels working between the primary and specialist care levels? And what is the density of their use?
- What is the impact of the programme on the community?
- What are the cost–benefits and the cost–effectiveness of the programme?

In planning a records and information system, it is important to generate data as part of routine care. This is important, as independent data gathering is not always feasible. Additionally, all data should not be from one level only and different types of information should be collected at appropriate levels [22].

Information system at the primary health care level

After non-specialists (primary health care doctors or health worker) have received mental health training, it is important that they keep a simple

record system for recording their activities. Health personnel are often reluctant to maintain such records. Many other programmes (such as growth monitoring in children) have experienced similar difficulties. In view of this, the record should be as simple as possible. The following schema is proposed:

- Each identified mentally ill person should have an individual record.
- Each record should contain the following minimum information:
 - sociodemographic information such as age, sex, mailing address, other contact information, next of kin
 - mode of referral
 - distance of patient's dwelling from the health facility
 - clinical details such as presenting symptoms, duration of illness, past treatment, disability
 - diagnosis
 - treatment advised, place of treatment and type
 - record of follow-up contacts and problems encountered in care
 - referral, if any advised.

This amount of detail can be reasonably obtained within about 5–10 minutes of interview. Recording can be simplified by providing multiple-choice responses, so that the recorder has only to tick the relevant items

It is important to have such records in the local language and prepared either on cards (with a box to store them) or in a book of 30–40 sheets. A ring file is suggested. These simple measures go a long way towards making records effective.

If possible, it would be valuable for the primary health care worker to record all referred cases in a separate notebook.

These data maintained by primary health care personnel are copied for analysis by the supervisory team, leaving the original records for the local clinic's use. This simple system of recording would allow for periodic review etc., and would form the focus of discussion by the supervisory team during its visit.

Record system for the supervisory team

For the successful implementation of the mental health care programme at primary health care level, regular support and supervision by a specialist team is essential. This supervision is especially important during

the first 12–24 months. These visits can help to clarify the functions of health personnel at different levels of care and also maintain quality of care.

Specifically, during every visit by the professional team, a record of activities should be maintained. Such a record would cover:

- the clinical condition of patients necessitating referral
- adequacy of the diagnosis of new cases seen in the preceding month(s)
- adequacy and appropriateness of the treatment initiated
- adequacy of record, drug availability, etc.

In addition, it is desirable to identify periodically from the total pool of patients, a random 5%–10%, and call them for review. Such an analysis can provide answers to key questions about the quality of care such as accuracy of diagnosis, side effects and follow-up. As pointed out earlier, the goal of this exercise is a positive one and can also form part of continuing in-service education.

In practice, supervisory team visits do not take place in an orderly manner unless adequately planned. It is harmful for the programme to convert a visit into a social occasion or for a demonstration of the programme to visiting officials. If the need for the latter exists, such demonstrations should not replace the review visits but should be planned as additional visits.

It is often the case that primary health care programme data are not linked with data collected by specialist centres. It is particularly important for specialist centres to have this linkage as it provides a better picture of disease prevalence, trends and service needs.

The following issues can be well addressed by linking these records:

- the prevalence of neuropsychiatric illnesses in different catchment areas
- the duration of symptoms at different points of contact before help is sought
- diagnosis, distribution and changing patterns over time
- treatment strategies employed at different levels of care
- referral density from primary health care facilities and vice versa
- comparison of the course and outcome of cases treated at primary health care and specialist levels

These goals can be met by organizing the records as follows:

- opening of a register in which all new patient contacts from the catchment areas are entered (and duplications avoided)
- collection of basic information at the time of registration with regard to minimum demographic and clinical data.

Tertiary level information and analysis of the annual data for changing trends in those seeking care

An information system as outlined above should form part of all primary health care programmes. However, in those situations where additional human resources are available, planned data gathering as outlined below can assist the mental health programme:

- comparison of different health facilities regarding use of services
- study of a group of patients receiving regular help and their level of social functioning as compared to those not receiving treatment
- study of the general public's attitudes towards mental disorder
- pathways to care, or how patients reach mental health services
- changing patterns of presenting complaints
- cost–benefit analysis of care for persons in specific diagnostic categories
- indirect evidence of care in terms of suicide, homicide, divorce, compulsory admission, and so on.

Chapter 6

The role of training in the context of national mental health programmes

Integrating with primary health care

A WHO intercountry meeting on mental health held in the Syrian Arab Republic in 1985 highlighted the importance of developing comprehensive national mental health programmes. These programmes should have clear objectives, targets and plans of activities based on the principle of integration of mental health into general health services at primary health care level. The main strategy proposed for achieving these objectives was to provide focused, goal-oriented mental health training for primary care in rural and

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 non-specialized 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 [8].

district centres [2,18,23,24]. It has been convincingly demonstrated in a number of countries such as Islamic Republic of Iran, Pakistan and Saudi Arabia during the past three decades that, with appropriate training, health staff at primary care level can adequately look after a limited number of common neuropsychiatric disorders with the aid of two or three essential neuropsychiatric drugs and psychosocial intervention. Furthermore, such training in psychosocial knowledge and skills has the potential to improve the quality of general health services [20].

Providing mental health training for various categories of general health staff working in primary health care is an enormous task. Ideally, such mental health training should be provided at the point of entry for medical doctors and other health personnel. Unfortunately, it is either not done at all or done in such a way that mental health and behavioural sciences appear to have no relevance to health care delivery. The approach is to provide short courses of in-service training which are task-oriented and related to the day-to-day problems dealt with by health staff at primary health care level. To carry forward such a large programme, a cascade model needs to be adopted in all the countries concerned.

The shortage of senior mental health professionals in almost all the countries of the Region continues to hamper progress, even though all countries have almost doubled the number of professionals during the past decade. Current training leading to a postgraduate qualification in psychiatry is available in only half of the countries. Most of the remaining countries continue to be dependent on overseas training and the importation of expatriate professional staff for their mental health programmes. A number of countries of the Region, however, are trying to enlarge the mental health component of their medical undergraduate training programme, but face stiff resistance from established disciplines.

The retraining of general physicians, general hospital residents and family doctors is an important step towards extension of services to primary health care. A number of countries have started special training programmes for their general medical staff. The training covers essential aspects of more common mental disorders, simple counselling skills and the use of essential pharmacological interventions. The models for achieving this retraining vary considerably between countries, depending on the organization of their

postgraduate facilities and the presence of established systems of release from their service routines, to attend specific training courses.

Training of primary care physicians

The countries in the Eastern Mediterranean Region differ from each other in terms of the availability of resources, the number of senior trainers and the existing levels of knowledge and skills among their primary care physicians. In spite of these differences, there are some objectives for training that are important for all countries.

Objectives of training primary care physicians

Training should be relevant to the daily work of primary care physicians. Emphasis should be on acquisition of skills rather than on acquiring knowledge only. The training should affect the attitude of the trainees by raising the awareness about the importance of psychosocial factors and behaviour in health and disease. Training should enhance correct management skills while avoiding unnecessary complexity or the use of technical jargon. The range of interventions that can be undertaken by the health personnel at each level should be specified for each country and periodically revised (Annex 7). Training should have an impact on existing services by decreasing the number of unnecessary secondary referrals, laboratory tests and hospitalizations.

Primary care physicians can be trained through a number of methods (Annex 9). The common methods used are:

- case demonstration
- case conference
- criss-cross discussion
- role-playing
- use of audio tapes
- use of television and videotapes
- use of manuals.

Evaluation and monitoring of training programmes

The development of a comprehensive training programme evolves through progressive reinforcement by means of several training courses. Pre- and post-training evaluation of a trainee's knowledge, skills and attitudes about neuropsychiatric disorders and their treatment provide a measure of the efficacy of the programme (Annex 10).

Trainees should be asked to comment freely on the content, organization and delivery of the courses, indicating which elements of training they found helpful and which may have been unhelpful or confusing. This, together with the results of objective evaluation of trainee skills/knowledge, provides the material necessary to refine the course for the next batch of trainees.

All courses should include the following baseline measures, which are important for evaluation:

- a record of the trainees' "psychiatric" diagnosis during the previous month
- a structured questionnaire to assess the knowledge, attitudes and practices of trainees
- a 10-minute history from a trained role-player portraying a common neuropsychiatric illness in order to assess communication skills.

However, it is to be noted that all these measures may not be possible for all centres to carry out because of logistic and/or resource constraints, in which case the most feasible measure can be adopted initially.

All courses, in addition to repeating the above measures, should also collect the rating of the relevance and quality of each component of the course.

Optimally, one to three months after course completion, trainees should be surveyed by postal questionnaire to ascertain the impact of training on their practices.

In addition to these direct measures of the impact of training, it is possible to use health service statistics to monitor the impact of newly trained personnel on the existing services. Health administrators, in particular, would find such data invaluable. The information that administrators are looking for can be conveniently summarized as educational evidence (evidence that the training has achieved the objectives

set for it); health service evaluation (evidence that training has had an impact on services—for example, the number of referrals to secondary care before and after training); and systematically collected information on the number of cases identified by trained primary care physicians. If this last is collected for the broad diagnostic groupings taught in the course, the administrators would have the information they need to determine resource allocation.

Constraints in the implementation of training programmes

Although techniques to meet the training needs of primary care physicians and other personnel are widely available a number of constraints still remain.

The first and most serious major constraint is a lack of enthusiasm among mental health professionals as well as among senior administrators. This can be rectified to some extent by adopting a mental health policy and programme at national level.

The second major constraint is the lack of senior trainers in the Eastern Mediterranean Region. Some countries have only a handful of specialists with the basic skills to initiate training. The establishment of some regional resource centres where potential trainers can gain skills and experience through short-term fellowships would greatly assist the spread of trainers.

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 but where they already exist the prime consideration should be to ensure that the staff patient ratio allows adequate treatment, care, and rehabilitation. A network of other services as described in this report should support them.

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 [8].

Sometimes concern is expressed about the lack of quality audiovisual equipment. Yet much can be achieved without resorting to sophisticated audiovisual material. Lectures and case demonstration combined with criss-cross discussion and role-playing can be substitutes for the television camera and monitor. However, the value of television as a comparatively inexpensive learning technology cannot be overestimated.

Special aspects of training of auxiliaries and other health personnel working at primary health care level

Along with primary care physicians there is a large number of other health personnel working at primary health care level. However, there is as yet no standardized pattern of staffing of such health personnel across the countries of the Eastern Mediterranean Region. Different categories of health staff with varying duties and responsibilities have evolved in different countries. Different names, such as health guides, health workers, birth attendants, health technicians, sanitary patrols, vaccinators, dispensers, nurses or health assistants, appear in the lists of health services of each country.

In recent years, there has been a tendency in most countries to reduce the categories of health staff in primary health care services and encourage multiple functions for different categories. As yet there has been no agreement on the mental health tasks which these health personnel should perform; indeed, in most countries, there is at present no clearly defined mental health role for these workers. Some countries have proposed preventive and promotive roles while some others have suggested limited curative roles for such staff. Decisions about mental health tasks to be performed by these workers depend on many factors, such as the educational background of workers and availability of other trained human resources. In countries where the number of primary care doctors and specialists is limited, health workers are bound to be given added responsibility. Recent evidence in some countries of the Region, such as Islamic Republic of Iran, Pakistan and Yemen, suggests that, with appropriate training, health workers can adequately handle a limited number of neuropsychiatric conditions, such as epilepsy, psychosis and severe depression, with one or two drugs and also

provide counselling for mental retardation and substance abuse [4,6,20,23,24].

Principles of training auxiliaries

The following principles for training of auxiliaries or other health personnel working at primary health care level are important.

- The mental health training programme for auxiliaries should be made simple (even simpler than that which has been proposed for primary care physicians).
 - Greater emphasis should be placed on preventive and promotive aspects focusing on a limited number of neuropsychiatric disease conditions, such as epilepsy, psychosis, depression, drug dependence and mental retardation.
 - Psychosocial skills, such as the art of listening, assessing psychological or social stress, or giving emotional support to a family in a time of crisis, should form an essential part of training.
 - Techniques of working with the family and community should be included in training.
 - Linkage of mental health training with other preventive and curative tasks at primary health care level must be emphasized.
 - Short lectures, case demonstrations and group discussion can be used for training. Audiovisual aids including videotapes should be used where feasible.
 - Pre-assessment and post-assessment of knowledge, skills and attitudes is an essential part of training.
 - Training should preferably be done at primary health care centres or rural health centres, and the patients recruited for training should be locals of the area. Simplified manuals and other teaching aids should be specially prepared for primary health care workers in local languages.
 - Psychiatrists from distant university centres should not conduct training courses; physicians and administrative staff working in the health centres should be involved in training.
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Chapter 7

Developing programmes for the prevention of mental disorders and the promotion of mental health

Strategies for prevention of mental, neurological and psychosocial disorders in national mental health programmes

A large proportion of neuropsychiatric disorders (and of the subsequent disabilities) is preventable [2,25–27]. The implementation of comprehensive programmes of prevention based on currently available technologies could produce a substantial reduction of suffering to individuals and their families, and of the socioeconomic losses, linked to these disorders. In the countries of the Eastern Mediterranean Region, faced with numerous public health problems and often suffering from scarce resources (which are mainly used to provide treatment), proposals for preventive action against neuropsychiatric illness have met with negative attitudes and responses from both planners and mental health professionals. Many mental health professionals feel that primary prevention of mental and neurological disorders is difficult. This opinion is based on viewing “neuropsychiatric illness” as a term exclusively reserved for the most serious disorders (such as schizophrenia) and on the knowledge that certain mental disorders are linked

with complex psychosocial issues, which are either hard to quantify or impossible to alter (such as depression or drug dependence) Now that the definition of tasks of mental health programmes is clearer and that it is accepted that such programmes must deal with common neuropsychiatric disorders, it should also become possible to convince the mental health professionals of the possibility of preventive action.

In recent years, countries of the Region have included prevention in national mental health programmes as a major aim of their plans of action. A comprehensive list of effective measures for promotion of mental health and prevention of mental illnesses that could be undertaken is given in Annex 5 [25].

The activities listed and the measures proposed must be applied consistently and over a sufficiently long time. This can happen only if the implementation of the programme is formally embedded in the national health programme, appropriate training is provided for health workers and others engaged in implementation of the programme and the exercise is backed by ongoing evaluation in order to monitor the impact of these measures.

Strategies for the promotion of mental health and healthy lifestyles in the framework of national health programmes

Advocating for mental health

The position of mental health on the scale of values of individuals and communities is low in most communities. Many other aims, such as wealth and physical beauty, are placed higher on the scale and receive precedence when decisions are taken about spending money or investing effort. Even when quick-wittedness, serenity or mathematical ability is considered desirable, it is rare that these are seen as expressions of mental health and a vigorous mental life. Societal efforts to improve or maintain mental life in general are frequently half hearted, and mental health programmes lag behind other programmes in priority and popularity.

It should also be noted that there is no universally acceptable definition of mental health. However, most of the definitions produced over the years in the literature include freedom from manifest psychopathology and the potential to cope with the stresses of life and fully use one's

capacities. The field of promotion of mental health is chiefly concerned with increasing the potential for leading a fulfilling life. Since all the definitions of mental health are rooted in value judgements, and religion is such an important contributor to the value systems prevalent in most of the countries in the Eastern Mediterranean Region, religious concepts need to be seriously considered when framing regional mental health promotion activities.

The movement towards national mental health programmes is relatively new. It started in the mid 1970s, and in recent years has progressed more rapidly in developing countries than in the industrially developed countries. This is probably because in the established market economies of Europe and north America, there were already well developed mental health services existing both in the public and in the private sectors. In the developing countries, human and material resources are scarce and in order to meet the mental health needs of their populations the emphasis has to be on a primary health care approach, multi-sectoral collaboration and use of human resources in the existing health infrastructure. A WHO expert committee meeting in 1974 on the organization of mental health services in developing countries provided the broad framework for the developments of the past three decades [8].

It is clear that the promotion of mental health cannot be done by the mental health services alone. In fact, mental health specialists will have a rather limited—albeit very important—role in the promotion of mental health. Their tasks will be those of advocacy and of technical support to programmes for which other social sectors will have to carry principal responsibility. These will include in particular the schools, community organizations, religious institutions and political bodies likely to influence public opinion. However, many others—such as the entertainment industry—will also have to be engaged in this effort. For this reason it will

Collaboration with non-medical 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 [8].

be of great importance that the national coordinating bodies dealing with mental health exert their role in promotional activities.

The promotion of health lifestyles was the topic of a discussion by the WHO Regional Committee for the Eastern Mediterranean [28]. The promotion of mental health is a concept that is akin to the promotion of healthy lifestyles but covers a broader area. Both efforts can however be undertaken in conjunction and using similar approaches. .

Success in efforts to promote mental health will depend on the clarity with which programme proposals are formulated and on their immediate applicability. In view of the specificity of the situations in the countries of the Region, it will be important that the proposals and materials are tailored accordingly, ensuring that the different disciplines and sectors involved are represented.

The following areas of mental health promotion are particularly stressed for inclusion in the activities in national programmes.

School mental health programmes

As nations have moved towards a commitment to universal education, schools are finding it necessary to expand their role by providing health services, including mental health services, to deal with factors interfering with schooling [29–34].

Schools, with the full support of families and the community, are currently the best place to develop a comprehensive mental health programme for children for the following reasons:

- almost all children attend school at some time during their lives
- schools are often the strongest social and educational institutions available for intervention
- schools have a profound influence on children, their families and the community
- young people's ability and motivation to stay in school, to learn and to use what they learn is affected by their mental well-being
- schools can act as a safety net, protecting children from hazards that affect their learning, development and psychosocial well-being
- schools are crucial in building self-esteem and a sense of competence in addition to the family

- school mental health programmes are effective in improving learning and mental well-being
- when teachers are actively involved in mental health programmes, the interventions can reach generations of children.

Teachers have often received some training in developmental principles. This makes them potentially well qualified to identify and remedy mental health difficulties in school-aged children.

A comprehensive mental health programme should be part of a comprehensive school health programme, aimed at providing experience that will strengthen the children's coping abilities to counter environmental stress and disadvantages with which they may have to cope while growing up. Comprehensive school health initiatives are available that result in higher school attendance rates, enhanced academic success, less school drop-out and reduced criminal behaviour. Mental health and life skills education has been demonstrated to reduce drug use, alcohol consumption and cigarette smoking in children and adolescents. School-based mental health interventions may be environment-centred or child-centred and changes in one can affect the other.

Children in schools offer an excellent opportunity to promote sound principles of mental health and healthy lifestyles. Already a number of countries of the Region, such as Bahrain, Egypt, Islamic Republic of Iran and Pakistan, have started such programmes in school and these need to be further developed and extended (see details in country profiles, Part 2).

Collaboration with religious leaders in the promotion of mental health

Religion often provides a broad framework for choice of lifestyle, interpersonal relationships, family life and values. Good progress has already been made in some countries for collaboration with religious leaders and institutions in activities related to mental health programmes, such as using religious leaders to campaign against drug abuse in Egypt or use of centres of religious healing for extension of mental health services in Pakistan and Sudan. There is need to further develop and extend such activities [39].

Use of the press, television and other media

The mass media are important agents of social change and help shape individual choice. As yet, mental health professionals have made a very limited contribution to the promotion of mental health through the media. Those efforts that have been made, such as in Egypt, Pakistan, Islamic Republic of Iran and Tunisia, have been well received and the need for greater dialogue and collaboration between mental health professionals and media professionals is being felt in a world where the media play an increasingly important role in determining values, lifestyles and attitudes [28]. Mental health week has become the focal point for many groups of individuals in order to increase awareness in the community. The media have also taken up seriously the challenge of educating the public. The number of national celebrations across the Region has increased from tens to hundreds.

Collaboration with nongovernmental organizations

Many nongovernmental organizations are doing excellent work in the field, partly because of the advantages they have over governments in micro-level planning and implementation with a great amount of operational flexibility. They are especially active with respect to the care of the mentally handicapped and the elderly and management of substance abuse. Mental health professionals must collaborate with them to further propagate national programmes.

Families and mental health

The family occupies a central position in the promotion of mental health as it is the crucible in which the personality of an individual develops and the framework of values is formed. Changes in recent decades, especially those resulting from urbanization, have led to the joint family system breaking down. Schools and the mass media have taken over some of the traditional roles of parenting. The nuclear family places heavy stress on parents to fulfil the multiple needs of children. Single-parent families, due to migration, divorce or death, are recognized as having a negative impact on child development.

Mental health professionals must understand the changes in family structure and functioning. It is not possible to go back to the past family

system but it should be possible to build the strengths of the family to meet the needs of the family members. Specifically, training in parenting skills, setting up of day-care facilities, crisis support, formation of self-help groups, and psycho-educational programmes for families with specific problems are examples by which negative impact can be minimized [2]. Furthermore mental health professionals can also influence laws and policies affecting the family structure and dynamics.

Role of psychology and the behavioural sciences in the development of strategies

Recent advances in clinical psychology and other branches of the behavioural sciences have led to the development of a large body of knowledge of direct relevance to the promotion of mental health and the prevention of disorders [25–27]. Some of the areas that are particularly relevant are:

- social and developmental influences on mental health, such as factors affecting the intellectual and emotional growth of children
- factors affecting motivation to change high-risk behaviour
- methods of preventing “burn-out syndrome”
- psychological aspects of “vulnerability”, the importance of cognitive variables, such as self-esteem and of social, cognitive and emotion-modifying skills
- secondary and tertiary prevention of mental disorders, such as effective psychological treatments for conduct and learning disorders in children and of anxiety, depression and sleep disorders in adults and functional problems associated with sensory loss in the elderly, as well as the psychological component of rehabilitation programmes for persons with schizophrenia or head injury
- the prevention of physical disorders, such as reduction of risk factors in coronary heart disease, and psychological treatment of pain, including headache.

Involvement of university/academic centres in national mental health programmes

Most of the countries in the Region have well established mental health institutes and departments of psychiatry. Similarly, most of the universities and major academic institutions have departments of psychology, sociology and other behavioural sciences. There is a need for these departments to be more involved in the activities of the newly emerging national mental health programmes. Traditionally, the university centres have limited their role to teaching undergraduate and postgraduate students, with some additional involvement in research. In general, university centres have kept themselves aloof from the activities of the public health sector, the responsibility for which has been left largely to the ministries of health. Universities and other academic centres need to play a more active role in the national programmes.

Governments in countries of the Region are generally supportive of the development of national mental health programmes. However, good models of intersectoral collaboration and mental health services in primary health care suitable for developing countries are limited at present and unfortunately, in most of the countries of the Eastern Mediterranean Region, the priority accorded to mental health programmes is also not very high. Therefore a crucial question is who should provide the technical expertise to develop and sustain these newly emerging national programmes?

In these circumstances, the role of mental health professionals, who understand and value the progress of these mental health programmes better than others, becomes critical and as traditional leaders of mental health professionals work in the universities and academic centres, their involvement in these programmes is vital.

In the Eastern Mediterranean Region, a number of university departments in Egypt, Islamic Republic of Iran, Iraq, Morocco, Pakistan, Tunisia and Yemen have developed active collaboration with their respective ministries of health to develop national mental health programmes in their countries. For example, since 1985 there has been a significant development in the Islamic Republic of Iran where the newly created universities of medical sciences now combine the role of teaching along with the health care responsibility for the province in which the university is situated. This system has contributed to the progress of the mental health programme in the country (see country profiles, Part 2).

Areas in which mental health professionals, working in the university centres, can play a role in the national programmes of mental health

- Academic centres' role in national mental health programmes
 - Technical advice and assistance in formulating the document on national mental health policy and programme
 - Representation on national and provincial multisectoral groups to monitor and coordinate the progress of the programme
 - Leadership role in the activities of the national programme, which can include:
 - organization of sections of community psychiatry in the existing departments of psychiatry
 - activities related to the extension of mental health care services in the rural and urban areas (responsibility of providing care to specific catchment areas)
 - development of suitable teaching/learning materials in local languages for the training of general physicians and other staff working in primary health care, and organization of workshops for training of trainers, in collaboration with the ministry of health
 - Orientation of the general public and nongovernmental organizations to the programmes on promotion of mental health through meetings and lectures on radio and television and writings in the press, etc.
 - Reorientation of teaching of all health personnel, such as psychiatrists, doctors, nurses, social workers and psychologists, with special emphasis on:
 - inclusion of behavioural and psychosocial sciences in the curricula
 - inclusion of principles and activities of national mental health policy and programme as a regular part of teaching
 - practical training in community mental health linked with extension of services in the rural/urban areas
 - Involvement in needs-based research to support the national programme and evaluation of the innovative approaches developed as part of the national programme
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Chapter 8

Needs assessment, research and evaluation

Importance of research

At present, there is very limited mental health research from the countries of the Region. However, it is recognized that research has to be an important part of the development of mental health programmes. There are many reasons for the emphasis on country level mental health research. Firstly, there are differing risk factors in the countries of the Region which requires that epidemiological studies are carried out in individual countries. Secondly, mental disorders differ in expression modified by factors like education, social norms and since diagnostic systems are developed for use in international situations, there is need for local knowledge to influence the development of diagnostic systems. Thirdly, the beliefs and traditional practices have a greater role in seeking help in countries of the Region and services have to be developed based on these factors. Fourthly, religion is an important part of the lives of the people and this area can contribute to better understanding of mental health.

The priorities for research have been regularly discussed in the many intercountry reports (Annex 6). The section on research in chapter 4 of *The world health report 2001* [2] provides a good framework for planning research studies in Member countries.

Promoting research

Note. This section is taken from *The world health report 2001 Mental health: new understanding, new hope*, Geneva, World Health Organization, 2001, 104–106

Although knowledge of mental and behavioural disorders has increased over the years, there still remain many unknown variables which contribute to the development of mental disorders, their course and their effective treatment. Alliances between public health agencies and research institutions in different countries will facilitate the generation of knowledge to help in understanding better the epidemiology of mental disorders, and the efficacy, effectiveness and cost-effectiveness of treatments, services and policies.

Epidemiological research

Epidemiological data are essential for setting priorities within health and within mental health, and for designing and evaluating public health interventions. Yet there is a paucity of information on prevalence and the burden of major mental and behavioural disorders in all countries, particularly in developing countries. Similarly, longitudinal studies examining the course of major mental and behavioural disorders and their relationship with psychosocial, genetic, economic and other environmental determinants are lacking. Epidemiology, amongst other things, is also an important tool for advocacy, but the fact remains that many countries lack data to support advocacy for mental health.

Treatment, prevention and promotion outcome research

The burden of mental and behavioural disorders will only be reduced if effective interventions are developed and disseminated. Research is needed to develop more effective drugs which are specific in their action and which have fewer adverse side-effects, more effective psychological and behavioural treatments, and more effective prevention and promotion programmes. Research is also needed on their cost-effectiveness. More knowledge is required to understand what treatment, either singly or in combination, works best and for whom. Adherence to a treatment, prevention or promotion programme can directly affect outcomes, and research is also needed to help understand those factors affecting adherence.

This would include examination of factors related to: the beliefs, attitudes and behaviours of patients and providers; the mental and behavioural disorder itself; the complexity of the treatment regime; the service delivery system, including access and treatment affordability; and some of the broad determinants of mental health and ill-health, for example, poverty.

There remains a knowledge gap concerning the efficacy and effectiveness of a range of pharmacological, psychological and psychosocial interventions. While efficacy research refers to the examination of an intervention's effect under highly controlled experimental conditions, effectiveness research examines the effects of interventions in those settings or conditions in which the intervention will ultimately be delivered. Where there is an established knowledge base concerning the efficacy of treatments, as is the case for a number of psychotropic drugs, there needs to be a shift in research emphasis towards the conduct of effectiveness research. In addition, there is an urgent need to carry out implementation or dissemination research into those factors likely to enhance the uptake and utilization of effective interventions in the community.

Policy and service research

Mental health systems are undergoing major reforms in many countries, including de-institutionalization, the development of community-based services, and integration into the overall health system. Interestingly, these reforms were initially stimulated by ideology, the development of new pharmacological and psychotherapeutic treatment models, and the belief that alternative forms of community treatment would be more cost-effective. Fortunately there is now an evidence base, derived from a number of controlled studies, demonstrating the effectiveness of these policy objectives. Most of the research to date has, however, been generated in industrialized countries and it is questionable whether results can be generalized to developing countries. Research is therefore needed to guide reform activities in developing countries.

Given the critical importance of human resources for administering treatments and delivering services, research needs to examine the training requirements for mental health providers. In particular, there is a need for controlled research on the longer term impact of training strategies, and the

differential effectiveness of training strategies for different health providers working at different levels of the health system.

Research is also needed to understand better the important role played by the informal sector and if, how and in what ways the involvement of the traditional healers can either enhance or adversely affect treatment outcomes. For example, how can primary health care staff better collaborate with traditional healers in order to improve access, identification and successful treatment of persons suffering from mental and behavioural disorders? More research is required to understand better the effects of different types of policy decisions on access, equity and treatment outcomes, both overall and for the most disadvantaged groups. Examples of research areas include the type of contracting arrangement between purchasers and providers that would lead to better mental health service delivery and patient outcomes, the impact of different methods of provider reimbursement schemes on access and use of mental health services, and the impact of integrating budgets for mental health into general health financing systems.

Economic research

Economic evaluations of treatment, prevention and promotion strategies will provide useful information to support rational planning and choice of interventions. Although there have been some economic evaluations of interventions for mental and behavioural disorders (for example, schizophrenia, depressive disorders and dementia), economic evaluations of interventions in general tend to be scarce. Again the overwhelming majority come from industrialized countries.

In all countries, there is a need for more research on the costs of mental illness and for economic evaluations of treatment, prevention and promotion programmes.

Research in developing countries and cross-cultural comparisons

In many developing countries there is a notable lack of scientific research on mental health epidemiology, services, treatment, prevention and promotion, and policy. Without such research, there is no rational basis to guide advocacy, planning and intervention [40].

Despite many similarities of mental problems and services across countries, the cultural context in which they occur can differ substantially. Just as programmes need to be culturally informed, so does research. Research tools and methods should not be imported from one country to another without careful analysis of the influence and effect of cultural factors on their reliability and validity.

WHO has developed a number of transcultural research tools and methods including the Present State Examination (PSE), Schedule for Comprehensive Assessment in Neuropsychiatry (SCAN), Composite International Diagnostic Interview (CIDI), Self Reporting Questionnaire (SRQ), International Personality Disorder Examination (IPDE), Diagnostic Criteria for Research (ICD-10DCR), World Health Organization Quality of Life Instrument (WHOQOL), and World Health Organization Disability Assessment Schedule (WHODAS) [41]. These and other scientific tools need to be further developed to allow valid international comparisons that will help in understanding the commonalities and differences in the nature of mental disorders and their management across different cultures.

One lesson of the past 50 years is that tackling mental disorders involves not only public health but also science and politics. What can be achieved by good public health policy and science can be destroyed by politics. If the political environment is supportive of mental health, science is still needed to advance understanding of the complex causes of mental disorders, and to improve their treatment.

Chapter 9

Advancing the global mental health agenda

An increasing burden

The 20th century witnessed significant improvements in somatic health in most countries. A number of key public health threats were eradicated or brought under control under the leadership of WHO. Priority was given to communicable diseases in view of their inherent potential for spread. A focus on noncommunicable diseases and mental health would now appear to be the next natural step in public health priorities. In the case of mental health, this is due to the inherent potential of mental health disorders to proliferate, not only as a result of complex and multiple biological, psychological, but also social determinants. However, the mental component of health has reached a plateau and, in many instances, has deteriorated seriously.

During the course of the past century, increased life expectancy was made possible by improved physical health. However, this has meant that a larger proportion of the population now reaches an age which carries higher risks of morbidity attributable to mental disorders.

WHO estimates that at any one time, as many as one in four of the world's population suffer from different forms of mental, behavioural and neurological disorders, including affective disorders, alcohol and drug abuse, epilepsy, dementias, mental retardation, schizophrenia and stress-related

disorders. Mental, neurological and substance use disorders cause a large amount of burden (13% of overall disability-adjusted life years) and disability (33% of overall years lived with disability) [2]. However, behind these often repeated figures lies an enormous amount of human suffering. More than 150 million persons suffer from depression at any point in time. Nearly 1 million commit suicide every year. About 25 million suffer from schizophrenia, 38 million from epilepsy and more than 90 million from an alcohol or drug use disorder. A large proportion of these individuals do not receive any health care for their condition.

The treatment gap for most mental disorders is high. According to a recent review by WHO from published sources, originating from the United States of America, Europe, Brazil, Chile, China, India, Zimbabwe and others [42], the percentages of people in need of treatment and not receiving it are as follows:

Schizophrenia	32.2%
Depression	56.3%
Bipolar disorder	50.2%
Panic disorder	55.9%
Obsessive compulsive disorder	57.3%
Alcohol abuse and dependence	78.1%

The reasons for this are twofold. First, the mental health infrastructure and services in most countries is grossly insufficient for the large and growing needs. Forty per cent of all countries have no policy for mental health care and 25% assign no budget for it. Even where a budget exists, it is very small with 36% of countries devoting less than 1% of the total health budget to mental health care. Although community-based services are recognized to be most effective, 65% of all psychiatric beds are still in mental hospitals, eating away at the already meagre budgets while providing largely custodial care in an environment that violates basic human rights [43]. Second, widely prevalent stigma and discrimination prevent those in need from seeking help [2].

Beyond the figures, which relate exclusively to mental and neurological disorders, far too many people, many of whom belong to

vulnerable groups such as women, children, the elderly, refugees and indigenous populations, suffer from the effects of violence, dislocation, poverty, isolation, stress and deprivation. These people and those suffering from acute or chronic mental illness that is inadequately managed, form a broad nation living dispersed within the many nations of the world.

Mental health, mental disorders and the Millennium Development Goals

1. Poverty and hunger. Mental disorders are much more common among the poor and they, in turn, increase poverty. A substantial proportion of homeless poor people have mental and substance use disorders. People who are refugees or displaced suffer from a broad range of mental disorders. Children who do not receive enough iodine through salt develop mental retardation. People exposed to major economic transitions are at risk for alcohol, substance use and suicide [44,45]. The stresses imposed by absolute poverty are powerful determinants of mental disorders such as depression and substance abuse. The psychological impact of relative poverty is the result of both the indirect (increased exposure to behavioural risk factors due to psychosocial stress) and direct (physiological circumstances associated with social position). One of the most consistent predictors of mental disorders in low income countries is lack of education. Linkages between poverty and depression have been clearly shown in studies of suicide among poor farmers in India, of maternal depression in women from impoverished peri-urban settlements in South Africa, and of severe depression among people who are less educated and unemployed in Chile.
2. HIV/AIDS, tuberculosis, malaria and other diseases. Mental and behavioural factors and disorders such as depression are important for adherence and compliance to treatment of these diseases. Substance use is an important risk factor for HIV.
3. Maternal health. Mental health care for depression and substance use disorders is important for decreasing the morbidity and mortality among

mothers, as well as to prevent short-term and long-term adverse effects on neonates and children.

Mental health, global development and the public health agenda

Recent developments, including experience related to the development of *The world health report 2001*, indicate why the case for advancing the interests of mental health has now become so compelling. Mental health problems already account for more than one-eighth of the global burden of disease and this is likely to increase in future. Decades of neglect of this area combined with current needs and emerging opportunities make urgent action a singular priority.

The proportion of the global burden of disease attributable to mental, neurological and substance use disorders is expected to rise from 12.3% in 2000 to 16.4% by 2020. Alcohol consumption alone is responsible for 4% of the global burden. More than 150 million persons suffer from depression at any point in time and nearly one million commit suicide every year. The population of injecting drug users comprises approximately 10 million people worldwide and 4%–12% of all HIV cases in the world are due to injecting drug use which is a driving force behind the HIV/AIDS epidemic in many parts of the world. The rise in the burden of mental, neurological and substance use disorders will be particularly sharp in developing countries, primarily because of the projected increase in the number of individuals entering the age of risk for the onset of disorders. These problems pose a greater burden on vulnerable groups such as people living in absolute and relative poverty, those coping with chronic diseases and those exposed to emergencies.

Mental health and WHO's agenda

In 2002 the Executive Board adopted a resolution (EB109.R8) on strengthening mental health and the World Health Assembly affirmed its provisions (WHA55.10). Similar resolutions on mental health were adopted by the African, Americas, European and Western Pacific regions between 1999

and 2003. Due to this focused effort, governments are now more aware of the negative impact of mental, neurological and substance use disorders not only of individuals but also of families and communities. However, governments need to make a more determined effort to put mental health in their agenda. In addition, in spite of the availability of cost-effective treatment for most of those disorders, a huge gap still exists between their implementation and the needs worldwide. Reducing this gap and improving treatment rates will not only reduce the burden of disease and disability and health care costs, but will also increase economic and social productivity. The burden attributed to depression or the mortality due to suicide, for instance, could be reduced by a half and one fourth, respectively, if all individuals concerned received appropriate care. Finally, to address this gap, it is vital that innovative mental health policies and legislation be designed and become a harmonious part of health systems. Promoting mental health, preventing mental disorders, mainstreaming cost-effective interventions in primary health care and engaging with local communities will be key components of such innovative policies.

The WHO mental health and substance abuse programme addresses a broad spectrum of issues and problems ranging from the promotion of mental health to the prevention and management of the most disabling mental, neurological and substance use disorders. Work carried out by WHO in recent years has clearly demonstrated the presence of three groups within people having mental, neurological or substance use disorders (roughly about 450 million people).

- a) Those that are at present not served by any mental health services. This group is as large as about 200 million people.
- b) Those who are at present served by inadequate and often inappropriate services, including long term hospitalization in mental hospitals where human rights violation is the norm, or in outpatient services with poor resources. This group is again about 200 million people.
- c) Those who are receiving adequate and appropriate services in settings with good resources and protection of human rights. This group is only about 50 million people; a vast majority of them live in developed countries.

Most academic, teaching and research efforts in the world are focused on the third group. WHO has a clear mandate to focus its attention and

efforts on the first two groups. The objectives of WHO's work are thus to extend services to those who at present have none and to improve quality of care and respect for dignity and rights to those who are at present inadequately and inappropriately served. For WHO, the present poor state of mental health services constitutes a global emergency.

WHO's strategic agenda

The successful mental health awareness activities promoted by WHO in 2001 (World Health Day, World Health Report, Ministerial Round Table in the 54th World Health Assembly) clearly created a solid ground for action. The WHO Mental Health Global Action Programme endorsed by the World Health Assembly in 2002 identified clear strategies for concrete action. These include information for decision-making and technology transfer, advocacy against exclusion and for human rights, development of comprehensive and effective mental health policies and services and promotion of public mental health research. These strategies are implemented at three levels, global, national and local.

Global level

Advocacy and global partnership on human rights of the mentally ill

A global movement is needed to turn the tide in favour of restoring basic human rights to the mentally ill and to decrease stigma and discrimination against them. Advocacy at higher levels is also required to strengthen the political commitment required to support mental health planning and its integration in the broader framework of general health and development. A global partnership with service users, families, professionals and social advocates needs to be built to achieve this [46].

Global information system

Basic information on epidemiology of mental disorders and on mental health resources within countries needs to be available as a baseline and for monitoring trends over time. The information should be comparable across regions and countries.

Guidance on policy and service organization for prevention and treatment of mental, neurological and substance use disorders

Given the early stage of development of these fields, standards, guidelines and training packages for policy, services and cost-effective preventive and curative interventions are needed for adaptation and use within countries [47,48].

National level

Mental health policy and legislation

A comprehensive mental health policy and legislation are essential requirements for taking forward the mental health agenda within any country. About 40% of countries do not have a comprehensive national mental health policy and progressive legislation incorporating protection of human rights of the mentally ill. WHO provides technical cooperation in developing mental health and substance use policies and legislation which are coherent components of the broader health system development [48].

Promoting life style conducive to mental health and to prevent mental disorders

Promotion and prevention are long term objectives in mental health. Evidence is accumulating regarding effective public health interventions towards these objectives. These include skills-based and information-based programmes for specifically targeted groups that are vulnerable or at a vulnerable phase of life. Programmes within schools and the workplace are included.

Reorganization and expansion of mental health services

Two-thirds of all mental health beds in the world are still in large mental institutions. Community mental health services are still in their infancy in most countries. Primary health care is still unable to provide even basic mental health care. WHO provides technical cooperation in reorganizing and expanding their mental health services. This involves collecting baseline data, developing achievable targets with timelines and providing technical assistance to achieve these.

Disease-specific programmes

Disease-specific programmes and initiatives can help in focusing attention and attracting resources to the most important mental health problems within the country. These include community care for severe mental disorders, campaigns against epilepsy, stress reduction and suicide prevention programmes, prevention of alcohol-related problems and prevention of mental retardation. WHO provides technical cooperation to establish and scale up these programmes.

Capacity development in monitoring and research

Countries need to develop capacity to undertake monitoring of their mental health services and to conduct relevant research in public health aspects of mental health. WHO provides technical cooperation in evaluating the research infrastructure, in developing an appropriate research agenda and in enhancing the capacity to conduct research as well as to disseminate and use the research findings.

Local level*Integration of mental health with other priority programmes*

Links and synergies between mental health and other priority programmes can be mutually beneficial. This needs to be systematically done at the local level. WHO provides technical cooperation to facilitate links between mental health and priority programmes like antenatal care, maternal and child health, prevention of violence, treatment of chronic diseases and treatment of HIV/AIDS and other infectious diseases.

Early identification and management of mental disorders, involvement of service users and families in treatment and maintenance treatment for substance dependence have been demonstrated to be effective. WHO provides technical cooperation to scale up these interventions.

Training to health and other sector personnel

Mental health professionals are neither available in adequate numbers in low and middle income countries nor necessary for providing all mental health care. It is vital that primary care health professionals and personnel from other sectors (e.g. education, social welfare, justice, and human resources) be trained in identification and management (including referral)

of common mental health problems and in prevention and promotion activities.

Empowerment of communities

It is important, especially in the area of mental health, that communities become involved in service provision as well as in prevention of mental disorders and promotion of mental health. WHO provides technical cooperation to empower community-based organizations, including services users and family groups, in playing a significant role in decisions related to planning that affects mental health.

Goals for 2016

WHO can and must play a key role in assisting Member States in implementing the above described three-level agenda. Some clearly defined goals drive WHO's effort.

1. Strengthening of mental health systems. At least 40% of all low and middle income countries should have systematically assessed their mental health systems using the WHO instrument. At least 20% of such countries should have taken concrete steps towards strengthening their mental health system using the WHO model.
2. Legislation and human rights for individuals with mental disorders. At least 40% of countries should have enacted or revised their mental health legislation within the previous ten years.
3. Suicide prevention initiative. At least 10 countries with the highest rates of suicide should have taken specific steps for reducing suicides (e.g. availability of lethal pesticides, guns).
4. Community care for severe mental disorders. The number of long stay (more than 2 years) patients in mental hospitals should have decreased by 50% with corresponding development of adequate community services.
5. Treatment of depression co-morbid with physical diseases. Evidence-based guidance for identification and treatment of co-morbid depression with common physical diseases (e.g. hypertension, obesity, diabetes,

- HIV, tuberculosis, malignancies) should be available for health care professionals in primary and specialist care [49].
6. Involvement of families in care of mental disorders. Systematic training for families in caring for severe mental disorders and intellectual deficiency should be available in at least 20% of all countries.
 7. Treatment of alcohol-related problems in primary health care. At least 20% of primary health care professionals in low and middle-income countries should be trained in identification and treatment of alcohol-related disorders.
 8. Policy for alcohol-related problems. At least 20% of countries should have taken specific policy steps (e.g. increased taxes on alcoholic beverages, implemented drink-driving laws, curbed marketing to minors) to decrease alcohol-related problems.
 9. Treatment of injecting drug use disorders and its consequences. At least 50% of affected countries should be using maintenance drug treatment routinely. At least 50% of affected countries should be integrating prevention and treatment of injecting drug use with those for HIV and AIDS.
 10. Mental health in emergencies. At least 20% of low and middle-income countries should have developed a comprehensive plan and trained professionals for mental health care in face of serious emergencies.

Main lines for mental health action in countries in the Eastern Mediterranean Region

As indicated in *The world health report 2001* the minimum actions required for mental health care refer to the same basic recommendations, which apply to countries in all WHO regions. The difference from country to country lies in the degree or intensity of the action, depending on the country's resources [50]. At the same time, it is considered there is enough evidence to justify several priorities for action in the Eastern Mediterranean Region.

1. Respect of human rights in people admitted to mental hospitals, and the gradual transfer of their care to the community level. It is difficult to imagine a place where human rights are so blatantly violated as in mental hospitals. Initially conceived as a place of refuge and protection for the “beloved brothers of the Prophet”, they gradually became not only un-therapeutic but also deleterious to many people, reinforcing disease chronicity and dependence of patients. In order to overcome this unwanted situation, there are two lines of action, one short-term and the other medium to long-term. The first refers to the immediate improvement of the living conditions in existing mental hospitals and the enforcement of respect for human rights, as spelled out in the UN Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care. The second concerns the gradual transfer of the focus of care from large mental hospitals to community-based facilities, and the predominant use of psychiatric beds in general hospitals for those unavoidable situations in which a psychiatric admission is necessary.

There is now evidence that community care results in better outcomes and quality of life, limits the stigma of receiving treatment, and leads to earlier treatment, in addition to complying with the UN principles. According to data recently published by WHO, the Region as a whole is below the world average in terms of a) presence of treatment facilities for severe mental disorders in primary care (50% versus 59.1% in the world); b) presence of three essential psychiatric drugs at primary health care level (78.9% versus 80.6%); and c) presence of mental health in community care (54.5% versus 63.4%). In spite of the fact that countries in the Region are above the world average in both the presence of a national mental health programme (6.4% versus 69.7% in the world) and a budget specified for mental health (80% versus 72%), these are clear indications of the need for a reorientation of mental health services in the Region. The information that almost three-quarters (74.7%) of all psychiatric beds in the Region are in psychiatric hospitals and only 11.2% are in general hospitals only reinforces this opinion.

2. Action on the growing use of illicit drugs, particularly of injecting drugs, and the devastating dissemination of HIV/AIDS. Although Islamic societies have always forbidden the use of substances that cloud the mind and impair consciousness, and in spite of a supposed revival of religiousness among youth, there is evidence of a worrying growing use of illicit drugs in countries of the Region. In addition to the socioeconomic problems associated with drugs, and the specific psychiatric problems consequent to the use of these substances, the use of injecting drugs also contributes to the dissemination of HIV/AIDS. Governments and societies must awake quickly to this growing problem and take appropriate action, ranging from limiting the access to these harmful substances and preventing their use, to the establishment of services for early identification of users, detoxification and long-term follow-up. A multisectoral approach is needed to achieve efficient results. The present successful WHO project in the Islamic Republic of Iran on drug dependence treatment and HIV/AIDS needs to be extended to other countries of the Region.
3. Reconstruction of the health care system of Afghanistan and Iraq, without which no mental health care is possible. Prolonged civil war and in Afghanistan and conflict in Iraq, as well as in other places in the Region, have practically destroyed the health care delivery system. Without the reconstruction of the basic health care delivery network no mental health care is possible. Rebuilding the mental health systems of Afghanistan and Iraq represents an excellent opportunity to demonstrate the advantages of mental health care integrated into general health care, as well as to demonstrate the feasibility of a sound mental health care system without the mistakes and disadvantages of large, centralized mental hospitals.
4. Technical cooperation with mental health services in the occupied Palestinian territory. The existing project has two main components: a mental health policy and five-year implementation plan, and the development of community mental health services including two in the psychiatric hospitals of Bethlehem and Gaza. The third important component of the project is the development of human resources which

includes training of health workers in the territory but also abroad (France, Italy and United Kingdom). The project also addresses the general public through the development of anti-stigma initiatives and campaigns and the establishment of family associations and service users groups. It is quite innovative that not only the family component was promoted (groups have been established in Bethlehem, Ramallah and Hebron) but also the service users' component through the support of the groups of "Hearing voices"; these groups have played a very important role in steering the situation in the psychiatric hospital in Bethlehem. Such a complex project, which encompasses policy, organizational, infrastructure and education issues, needs to be assessed. This is the reason why WHO initiated in the territory the WHO Assessment Instrument for Mental Health Systems (WHO-AIMS) to ensure the monitoring and evaluation of the mental health project on the ground.

5. The Darfur humanitarian emergency. The dramatic situation in Darfur will obviously represent a major challenge for health and mental health in the future. A sustained effort has already been initiated by WHO but it will require substantial international support for many years.
6. The increasing need for better information about mental health policy, service organizations, resources available, integration with primary health care and other key information, which are vital to better planning and rational investing. WHO is developing a systematic assessment of mental health systems in Afghanistan, Egypt, Iraq, Islamic Republic of Iran, Tunisia and the occupied Palestinian territory.

Part 2

Country profiles

Afghanistan

Overview

Afghanistan has a land area of 652 225 km². Large areas of the country, particularly in the north and the east, are mountainous with altitudes reaching 8000 metres. Many roads and tracks become impassable during the winter months. The most recent population estimates place it at 23 million (2004). The urban and nomadic populations constitute 25% and 3.6% of the population, respectively; more than half of the urban population lives in the major cities: Kabul, Jalalabad, Kandahar, Mazar-i-Sharif and Herat. The proportion of the population below 15 years and above 65 years of age is 45.5% and 2.4%, respectively (2000).

Afghanistan is designated by the United Nations as one of the world's least developed countries with an estimated infant mortality rate of 147 per 1000 live births (2002) and life expectancy of 44.7 years (2003). The overall literacy rate and adult female literacy rate are 16% and 5%, respectively (1997). The crude birth rate and the crude death rate are estimated at 48 and 17.2 per 1000 population, respectively (2002). Maternal mortality ratio is estimated at 160 per 10 000 live births (2003). Under-5 mortality rate is estimated at 257 per 1000 live births (2004). In 2001, the rates per 10 000 population for physicians, dentists, nurses/midwives and hospital beds were 1.9, 0.3, 2.2 and 3.9, respectively. The per capita income is US\$ 158 (2004), the Ministry of Public Health budget represents 6.3% of gross domestic product and per capita expenditure on health by the Ministry of Public Health was estimated in 2005 at US\$ 3.69 as opposed to the national average

of US\$ 10 per capita. Dari and Pushtu are the two national official languages.

The primary health care strategy was endorsed in 1979. The strategy sets the following objectives:

- increase accessibility and efficiency of the health care delivery system
- strengthen the functional integration of preventive and curative services
- adopt the team approach and strengthen the district health system
- improve public awareness about health and healthy lifestyles
- improve the development of human resources as regards planning, production and use by more equitable distribution of qualified personnel
- reallocate resources more favourably towards primary health care.

The health system infrastructure is a pyramid of referral institutions from health posts in the village, to basic health centres, on to provincial, regional and central hospitals. The health care system has five levels, from village, district, provincial and regional up to central level. At village level, there are the village health workers and traditional birth attendants, with a *feldscher* [male nurse] at the sub-centre or health post.

These are linked to basic health centres, at the district level, headed by a physician, and some districts have a district hospital with 10–20 beds. There are limited maternal and child health services and some family planning services in the sub-centres and basic health centres. In 1987, there were 13 sub-centres, 107 basic health centres and 172 hospitals. Not all health centres and hospitals are functional; and of those that are, some are operating with reduced capacity.

With a view to improving the operational efficiency of primary health care services, the Ministry of Public Health has begun to implement the district health system based on primary health care in many districts. In 1994, a policy of decentralization and delegation of financial and management responsibilities to regions and provinces was introduced. Operationally, the country is divided into seven regions—northern, north-eastern, central, southern, south-eastern, eastern, and western.

Due to these efforts, before the protracted period of conflict, 280 districts out of a total 330 district were covered with some components of

primary health care. Health personnel were state-employed; a few had private practices in addition to their public employment. Private practice concentrated mainly on running pharmacies; 92% of pharmacies and 30% of laboratories were privately owned. Nearly two-thirds of physicians' private clinics were situated in Kabul and the provincial capitals. Unfortunately, all of this information belongs to the past, and reliable information regarding today's situation is hard to come by and of course harder to quote.

The provincial health profiles presented by the regions during a health sector planning workshop, organized by the Regional Office in 1998, demonstrated wide variations in the levels of organization and management of health services; human resources and their distribution; number of health facilities, the package of services they provide; and accessibility of primary health care services.

The education sector is taking part in health education in schools; primary-level and secondary-level curricula have been revised to incorporate information on health matters. The Ministries of Agriculture, Information and Broadcasting, and Planning contribute to promoting people's health, and the Ministry of Planning ensures that health goals are incorporated into socioeconomic development plans. However, no adequate mechanism exists to ensure the accuracy of this information and systemic analysis and monitoring to show the impact of these actions on health.

Mental health

Overview

Any description and discussion of mental health care in Afghanistan must keep in view the sociopolitical realities of the country. More than two decades of fighting ravaged the whole country; death, disability, destruction and disease have affected all aspects of health. External and internal migration of millions of Afghans has affected the whole social and family structures.

Up until about 1995 the treatment facilities in the country consisted of the following.

Kabul province

- Kabul Psychiatric Hospital. This is a 50-bed short-stay hospital, with provision for 30 male and 20 female patients. It is located in an old building about 5 km from the city centre. Annual admission to the hospital is around 650 patients. Yearly outpatient attendance is estimated at 800, and the number of psychiatrists working in the hospital is 11, one of whom is a lady doctor.
- Marastoom Asylum. This is a 20-bed hospital, supported by the Afghan Red Crescent Society, which provides care for chronically ill persons, including the mentally retarded and those suffering from substance-related psychiatric disorders.
- Substance-dependent Rehabilitation Facility. This was started in 1990 in Kabul. Currently, there are 10 beds, of which two are for female patients. The annual admission is estimated at around 700 patients.
- Community mental health centres. The four centres at Wazir Akbar Khan, Katre Parwan, Khosal Miria and Alandin in Kabul province are presently not functional.
- Ali-Abad Hospital. There are only 5 beds for psychiatry in this general hospital of 60 beds. Annual admission is estimated at 420 patients.

Jalalabad province

- There are two centres for mental health care. The university hospital has 10 beds, and there are 25 beds in the general hospital. The total outpatient load is around 5000 cases per year, while admissions are estimated at 650 per year.

Mazar-i-Sharif province

- There is one mental health centre in the general hospital. The outpatients register showed 2119 cases in 1998, while 69 patients were admitted. Four beds are available for male patients only. There are three doctors working in this centre.

Mental health human resources

There is extreme shortage of all categories of trained mental health professional. There are only a handful of fully trained psychiatrists with a postgraduate degree/diploma qualification. Doctors working as psychiatrists have been trained for short periods abroad (Poland, Sudan, India) or have had in-service training within Afghanistan. Those serving as psychologists have a bachelor's degree in psychology from Kabul University. In 1990–91, a one-year in-service training programme for psychologists in learning difficulties was carried out. In 1996, a three-month diploma on mental health was conducted in Mazar-i-Sharif with the assistance of WHO.

Mental health training

Undergraduate medical education includes 18 lectures in each of the first and second semesters in the first year on behavioural sciences, 18 lectures in each of psychiatry and neurology during the fifth year, two weeks of clinical attachment each in psychiatry and neurology, and one month internship in psychiatry.

Postgraduate mental health training is not available in Afghanistan for any category of mental health professional.

National mental health programme and related policies

A committee set up by the Ministry of Public Health drew up a national mental health programme for Afghanistan. The programme was discussed and adopted at a national workshop for mental health held in Kabul in 1987. Policies for therapeutic and essential drugs were adopted in 1996 while narcotics and substance-abuse policy has been in place since 1988.

The national mental health programme has the following objectives: provision of mental health care to all the population; integration of mental health with primary health care; community participation; and services for special groups, especially those affected by war. The programme document outlines services, training, administrative strategies and approaches for promotion of mental health and provision of services for the war-affected population.

Community mental health programmes

A large number of doctors and other health personnel have undergone short-term training in basic mental health care. Many workshops, seminars and group educational activities have been carried out for various categories of personnel on mental health and substance-abuse related topics. Training programmes for non-health personnel, such as teachers, school principals, youth leaders, volunteers and community leaders have also been organized from time to time.

Two mental health manuals were prepared in Dari for primary health care doctors and other staff in 1998.

Current situation

The mental health services in Afghanistan are in a poor state. Despite neuropsychiatric disorders being recognized as a major public health problem during the health sector planning workshop in 1998 and a number of recent psychiatric epidemiological studies in the general population, only a few regions have outpatient services, supplemented by nongovernmental organizations supporting some centres around the country. WHO provides some neuropsychiatric drugs to the Ministry of Public Health but the capacity of the Ministry of Public Health is very limited because, despite setting up some new facilities in the 1980s, it does not have the trained staff available to operate these and consequently their services have been deteriorating year after year. In terms of health planning, as part of the Basic Package of Health Services (BPHS) mental health is included as one of the priorities from the village level onwards. In 2005, a 5-year mental health strategic plan of action was developed to address the needs of the population.

Limitations

The severe shortage of trained key mental health professionals, the extremely limited facilities, poor equipment and drug supplies and the prevailing socioeconomic circumstances and continuing insecurity are the major hindrances to the development of mental health services.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Some studies on refugees are available. Mukhamadiev (2003) studied the prevalence of depression in 908 Tadjik refugee women in Afghanistan and found a high prevalence of endogenous depression (28.6%). A 1.5 year follow-up showed good prognosis in subjects who had sub-syndromal depression, but not in those with endogenous depression. Rasekh et al (1999) found that symptoms that met the diagnostic criteria for anxiety, depression and post-traumatic stress disorder were common in 160 Afghan women (including 80 women currently living in Kabul and 80 Afghan women who had recently migrated to Pakistan) during the Taliban regime. Mghir et al (1995) used the Structured Clinical Interview for DSM-III-R to detect mental illness among 38 children and young adults and identified depression and PTSD in more than one-third of the subjects.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1986. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation. The new Afghan Government has identified mental health as one of five health priorities. Since 1986, there has been no new government policy regarding mental health and the old mental health policy is still followed. The policy outlines prevention, treatment and rehabilitative facilities for mentally ill patients.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1988. A new policy on drug demand reduction was formulated in 2002.

National mental health programme

A national mental health programme is present. The programme was formulated in 1988. The national mental health programme has the following objectives: provision of mental health care to all, integration of mental health

with primary care and community care, services for special populations, especially the war-affected. It also outlines services, training, administrative strategies and approaches for promotion of mental health and provision of services for the war-affected. It advocates the development of a nucleus of trained mental health professionals to act as 'master trainers' for primary health care physicians and health workers in their respective provinces in order to ensure at least a minimum provision of mental health services.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1996.

Mental health legislation

There is mental health legislation. The latest legislation was enacted in 1997.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary source of mental health financing is out-of-pocket expenditure by the patient or family. The country has disability benefits for persons with mental disorders. Disability support services are provided for persons with physical, psychiatric, intellectual, sensory or age-related disabilities (or a combination of these), which are likely to continue for a minimum of six months and reduce independent functioning to the extent that ongoing support is required.

Mental health facilities

Mental health is not a part of the primary health care system. Actual treatment of severe mental disorders is not available at the primary level. Community level workers from the local population (villages) have been involved in providing integrated health care for the last 8 years.

Regular training of primary care professionals is not carried out in the field of mental health. Two mental health manuals were prepared in Dari for primary health care doctors and other staff in 1998. WHO has organized mental health training for primary health care physicians. Nongovernmental organizations are running training courses for primary health care doctors,

nurses and midwives, village health volunteers and traditional birth attendants.

There are community care facilities for patients with mental disorders. Mental Health is included in the Basic Package of Health Services (BPHS) which covers health service delivery up to district level. New treatment guidelines for common mental health disorders are being formulated (draft is ready). Four Community Mental Health Centres have been established in the capital, but further expansion is required. There are two general psychiatric rehabilitation centres with 160 beds.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.055
Psychiatric beds in mental hospitals per 10 000 population	0.031
Psychiatric beds in general hospitals per 10 000 population	0.024
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	0.036
Number of neurosurgeons per 100 000 population	0.034
Number of psychiatric nurses per 100 000 population	0.07
Number of neurologists per 100 000 population	0.07
Number of psychologists per 100 000 population	0.09
Number of social workers per 100 000 population	0

Currently, there are no social workers, and there are only a very few trained psychiatrists. Most doctors working as psychiatrists have either had in-service training or have attended short courses abroad. A three-month diploma course was held in 1996 to train some doctors in psychiatry. Postgraduate training in psychiatry is not present. Psychologists get their training from Kabul University. Much of the qualified human resources and technical expertise has left the country.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in treatment. The Afghan Government collaborates with nongovernmental organizations to rapidly expand basic (mental) health services to underserved populations.

Information gathering system

There is no mental health reporting system in the country. Each hospital maintains registry books on their inpatient and outpatient information. Quarterly reports are submitted by the mental hospital to the Ministry of Public Health. The country has no data collection system or epidemiological study on mental health.

Programmes for special populations

The country has specific programmes for mental health for the disaster-affected population. There is a regular programme for traumatized children (trauma and grief programme) which is supported by UNICEF.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, amitriptyline, chlorpromazine, diazepam, haloperidol. The cost of medicines keeps fluctuating as the local currency is unstable due to the war. Over-the-counter sales of psychotropics occur.

Other information

There is a shortage of staff due to the war and more international support is needed. A new Mental Health Unit under the Primary Care Directorate was established in 2003 (it is not functional as yet). Since mental health is a component of the Basic Package of Health Services, guidelines and a treatment protocol for common mental disorders in primary health care have been developed. Treatment guidelines for substance use have also been almost finalized. A strategy for integration of mental health services into primary care was finalized in 2004.

Additional sources of information

Mghir R et al. Depression and posttraumatic stress disorder among a community sample of adolescent and young adult Afghan refugees. *The journal of nervous and mental disease*, 1995, 183:24–30.

Mohit A et al. Mental health manpower development in Afghanistan: a report on a training course for primary health care physicians. *Eastern Mediterranean health journal*, 1999, 5:373–377.

Mukhamadiev DM. Aspects of depressive states in repatriated female refugees. *Zhurnal Nevrologii i Psikiatrii Imeni S.S. Korsakova*, 2003, 103:21–23.

Rasekh Z et al. Women's health and human rights in Afghanistan. *JAMA*, 1999, 280:249–255.

van de Put W. Addressing mental health in Afghanistan. *Lancet*, 2002, 360:41–42.

Ventevogel P et al. Mental health care reform in Afghanistan. *Journal of Ayub medical college*, 2002, 14:1–3.

Bahrain

Overview

Bahrain consists of 33 islands, of which Bahrain island is the largest and contains the capital Manama. Over half the population lives in Manama and in Muharraq, the second island, which is linked, to Manama by a causeway. The surface area of the country is 718 km². The total population is estimated at 0.78 million in 1996 with an average population growth of 2.7% per year (2003). The urban population constitutes 100% of the total (2004). The people of Bahrain are largely Arab Muslims. About 66% of the population is local; the rest are expatriates, mainly from Bangladesh, India, Islamic Republic of Iran, Oman, Pakistan, Sri Lanka and eastern Asia. The proportion of the population below 15 and above 65 years of age is 27.6% and 2.57%, respectively (2002). Of adults (15 years and over), 88% are literate, and the adult female literacy rate is 83%. The infant mortality rate is estimated at 7.3 per 1000 live births, maternal mortality ratio 2.0 per 10 000 live births, crude birth rate 21.3 per 1000 population, total life expectancy at birth 73.8 years and under-5 mortality rate 9.4 per 1000 live births (2003). The per capita income is US\$ 11 872 (2003) and the budget allocated to the Ministry of Health represents 4% of the total. The Ministry of Health spends US\$ 232 compared to the US\$ 517 national per capita expenditure on health (2002). The rates for physicians, dentists, nurses/midwives and hospital beds per 10 000 of the population are 18.5, 2.7, 45.7 and 28.1, respectively (2003). There are 0.3 health centres per 10 000 persons (2003).

Development of health systems

The country's constitution upholds the people's right to health. Both the private sector and the community contribute to providing health care services, but the main burden rests with the government. Sectors that have an impact on health frequently interact in planning, implementation and evaluation.

Mechanisms for involving the community in the implementation of health strategies are not well established, the main hurdle being the lack of public awareness of health issues and problems. To overcome this, nongovernmental organizations receive full encouragement and financial support from the Ministry of Health and the Ministry of Social Affairs in order to promote health education at all levels. For example, youth clubs, together with the primary health care centres, conduct health education campaigns; the Bahrain Family Planning Society is actively engaged in workshops, seminars and lectures on family planning; and the Bahrain Red Crescent Society has been providing courses on first aid for several years. In addition, there are joint committees representing health centres and youth clubs in each area.

The Salmaniya Medical Centre is the main health centre in Bahrain. It is allocated a large percentage of the Ministry of Health's budget and provides most secondary and tertiary health care. There are 19 other health centres on Bahrain island as well as five rural maternity hospitals, one psychiatric hospital and one geriatric hospital for the Bahrain Defence Force, and three private hospitals. The College of Health Sciences provides training to students in nursing and allied health sciences.

The entire population is now covered with health care, safe drinking-water and adequate sanitary facilities. Moreover, maternal and child health care services cover the targeted population, with immunization coverage reaching almost 100%. Essential drugs are available in all health centres and community involvement, as mentioned previously, is becoming stronger.

Mental health

The Ibn Sina Psychiatric Hospital was founded in 1932, and the first qualified psychiatrist was appointed in 1967. This hospital is the nucleus of

mental health services. It has 201 inpatient beds (with a 20-bed alcohol and drug dependence unit, 25 beds for acute patients, 40 for short-stay patients, 42 for long-stay patients and 20 beds for the mentally retarded). There is a day hospital with a capacity of 40 patients. There are an average of 1000 admissions per year and about 20 000 attendants every year to the outpatient department. There are 22 psychiatrists, 3 clinical psychologists, 6 psychiatric social workers, and 79 psychiatric nurses in the country.

A diploma programme in psychological medicine has been available since 1991. This is organized in collaboration with the Royal College of Physicians of Ireland. The psychiatry department is involved in the training of the family physicians as part of a one-year diploma course offered by the college of health sciences.

The psychiatric community service was started in 1979 with the aim of extending psychiatric care to all those who need it in their own environment. Primary health care is well advanced in Bahrain. There are 19 health centres and each of these is within 5 km of its catchment area. Essential psychotropic drugs are available at all the health centres, and any new requirement can be met within 24 hours. A recent development is budget decentralization so that each health centre will handle it at its own level.

National programme for development of mental health and related policies

The policies for therapeutic and essential drugs and for narcotics and substance abuse were formulated in 1975 and 1983, respectively. The national mental health programme was developed in 1988 with the help of WHO. Its short-term objectives were:

- prevention and treatment of mental disorders and their subsequent disabilities by making mental health care available and accessible to all the population with special emphasis on the most vulnerable and underserved
- enhancement of the use of mental health knowledge in general health care, social development and improvement of quality of life by the extension of mental health care to primary health level

- public mental health education in order to increase the detection of illness and encourage community participation in the development of mental health services
- legislative measures for protection of the rights of mentally ill persons.

The long-term objectives are:

- planning and programming for special psychiatric services, e.g. substance abuse, abnormal mental offenders, mental impairment, psychogeriatrics and liaison psychiatry
- improving information systems and statistical data
- research to improve the state of mental health care, identification of needs, and setting of priorities for future plan of action.

Initiatives

There have been a number of initiatives towards using community resources for mental health work, notably:

- mental health training of expatriate child carers about normal psychological and social development of children during the first five years of life
- mental health training on how to cope with the daily routines of children in a positive way
- introduction to behavioural problems of children and how to approach them
- strengthening of the relationship between mother and child
- working with the Bahrain Women's Organization for advocacy, promotion of positive mental health and prevention of neuropsychiatric illnesses
- initiation of school mental health programmes.

Research

Research has been carried out on medical education; use of services; drug abuse; electroconvulsive therapy; attempted suicide; and child mental health, and some clinical drug trials have been conducted.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is substantial epidemiological data on mental illnesses in Bahrain in internationally accessible literature. No attempt was made to include this information here.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1993. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1983.

National mental health programme

A national mental health programme is present. The programme was formulated in 1989.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1975.

Mental health legislation

The latest mental health legislation is Decree 3. The latest legislation was enacted in 1975.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are tax-based and out-of-pocket expenditure by the patient or family. The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is available at the primary level. Primary care is provided only after stabilization of the case. There are 23 primary care centres, each within 5 km of the catchment area, and all have psychiatric drugs. Any new drugs can be procured within a day.

Regular training of primary care professionals is carried out in the field of mental health. The psychiatry department is involved in the training of family physicians. Child care workers have been trained on issues related to mental health and behavioural disorders.

There are community care facilities for patients with mental disorders. There are regular home visits through outreach programmes of the hospital. The psychiatric community care was started in 1979 and forms an important aspect of mental health delivery system along with primary care. During community visits, family members are encouraged to participate in the treatment. Patients are given information on treatment, management and other educational items related to their illness. A day care centre that can provide services for 40 clients exists.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	3.3
Psychiatric beds in mental hospitals per 10 000 population	3.3
Psychiatric beds in general hospitals per 10 000 population	0
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	5
Number of neurosurgeons per 100 000 population	0.3
Number of psychiatric nurses per 100 000 population	23
Number of neurologists per 100 000 population	1
Number of psychologists per 100 000 population	0.8
Number of social workers per 100 000 population	1.5

Psychiatric training is undertaken in the country with licensing from the Arab Board of Psychiatry. Beds have been earmarked for treatment of drug abusers and management of mentally retarded individuals.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention and rehabilitation.

Information gathering system

There is mental health reporting system in the country. Data are available from the Bahrain Health Statistics, 1999. The country has a data collection system or epidemiological study on mental health. Data collection is hospital-based.

Programmes for special populations

The country has specific programmes for mental health for elderly and children.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, biperiden. All drugs available at the psychiatric hospital can be made available to health centres on request and according to needs of known patients.

Additional sources of information

Al Haddad, Community psychiatry in Bahrain. *World health forum*. 1989, 10:432.

Okasha A, Seif el Dawla A. Reliability of ICD-10 research criteria: an Arab perspective. *Acta psychiatrica Scandinavica*, 1992, 86:484–8.

El Hefny F, Al Haddad MK, Mathur V. Utilisation of psychotropic drugs in patients of the long stay ward. *Pharmacoeconomics*. 1992, 1:203–6.

Abdel-Mawgoud M, Al-Haddad MK. Heroin addiction in Bahrain: 15 years experience. *Addiction*. 1996, 91:1859–64.

Al Hamadeh RR et al. Overdose among youth in Bahrain: psycho-social characteristics, contact with helping agencies and problems. *Journal of the Royal Society of Health*. 1997, 117:366–71.

Al Haddad MK, Baig BZ, Ebrahim RA. Epidemiology of HIV and AIDS in Bahrain. *Journal of communicable diseases*. 1997, 29:321–8.

Shooka A, al-Haddad MK, Raees A, OCD in Bahrain: a phenomenological profile. *International journal of social psychiatry*, 1998, 44:147–54.

Al-Musawi NM. Psychometric properties of the Beck depression inventory-II with university students in Bahrain. *Journal of personal assessment*. 2001, 77:568–79.

Derbas AN, al-Haddad MK. Factors associated with immediate relapse among Bahraini heroin abusers. *Eastern Mediterranean health journal*, 2001, 7:473–80.

Al-Haddad MK et al. HIV antibodies among intravenous drug users in Bahrain. *Journal of communicable disease*. 1994, 26:127–32.

Djibouti

Overview

Djibouti, which lies on the Horn of Africa at the southern entrance to the Red Sea, has a coastline of 370 km and an area of 23 000 km². According to estimates the population was 817 000 in 2004, and the annual population growth rate is 4.3% (2003); the percentage of the population below 15 years of age and above 65 years of age is 37.6% and 2.1%, respectively (2002). The total adult literacy rate and the adult female literacy rate in 2003 were 49% and 38%, respectively. According to the most recent statistics, the infant mortality rate is 102 per 1000 live births (2002) and the maternal mortality ratio is 54.6 per 10 000 live births (2002). The crude birth rate in 1996 was 42 per 1000 population. The total life expectancy at birth was 44.1 years in 2000. In 2002, the under-5 mortality rate was estimated at 94.6 per 1000 live births. The gross national product per capita is US\$ 854 (2002). The health budget of the government constitutes 6.3% of the national budget. The Ministry of Health expenditure per capita is US\$ 28.4 while the national per capita expenditure on health is US\$ 54 (2002). There are 2.2, 1.93, 8.0 and 16.1 physicians, dentists, nurses/midwives and hospital beds per 10 000 of the population (2004).

Administratively, the country is divided into five districts. Health activities in the public sector are fragmented and divided among several ministries, with the Ministry of Public Health and Social Affairs bearing the major responsibility. The Ministry of Public Health and Social Affairs has defined its health policy for developing health systems (1995). The general objectives of this plan are as follows:

- training of human resources
- strengthening preventive programmes
- improving hospitals
- ensuring the stability of the Djibouti family
- developing community involvement
- recognizing the importance and promotion of urban health services and adopting a national drug policy.

At the first level of contact with the health services, the system comprises small units which provide health care to remote or nomadic communities. They also offer some maternal and child health care. The middle tier of the pyramid consists of district hospitals, which provide non-specialized inpatient or outpatient care and supervise the activities of the rural health units under their jurisdiction. There is a tuberculosis service attached to each district health centre. In 1998, there were 24 primary health care centres all over the country, although the functioning of those located in northern districts of Tadjourah and Obock was severely impaired during the civil war of 1991–93. At the apex of the pyramid is the Hôpital Générale Peltier, the general hospital in Djibouti city, which has 610 beds and which provides specialized inpatient and outpatient services. There is, in addition, a small childcare hospital with 25 beds and a maternity hospital with 50 beds. Besides the public health sector, there are three small private hospitals (or clinics) with 61 beds. In addition, national and foreign nongovernmental organizations are involved in the health service delivery programmes. These include Catholic Relief Services, the Red Sea Mission, Organization of Volunteers for Progress (AFVP), Médecins Sans Frontières, and at the local level, the National Union of Djibouti Women.

In 1990, with the collaboration of WHO, a continuing education unit was set up in the ministry to take charge of training of personnel in the management of services. This programme aims to:

- improve the qualifications of health personnel
- increase the number of students in medicine, dentistry and pharmacy
- increase the number of trained paramedical workers
- assume responsibility for progressive replacement of the expatriate technical staff serving under cooperative agreements

- develop the national centre for the training of health personnel and organize a national programme for continuing education.

Mental health

Present mental health situation in Djibouti

Mental health problems are on the rise due to rapid and profound changes of lifestyle in Djibouti. However, there is decreasing tolerance of patients suffering from neuropsychiatric problems. These facts are particularly noticeable in urban areas, where patients are increasingly referred to public health staff who are not trained to deal with them. Thus, comprehensive mental health services are urgently needed. Although no study has been done on the role of *khat* in mental disorders in Djibouti, there is anecdotal evidence that its use is widespread.

Mental health facilities

Currently, the system of psychiatric assistance is limited to the department of psychiatry of the Peltier Hospital in Djibouti. The department has 50 beds, and its dilapidated condition does not make it an ideal place to treat patients with dignity.

More than 2000 people seek consultations at the department of psychiatry at the Peltier Hospital every year. These consultations relate to acute and chronic diseases. Annual admission is 500 patients. The period of hospitalization is one month on average. Ambulatory treatments follow hospitalization. This solution, which yields good results, involves great difficulties for the patients who live far from Djibouti city. The hospitalized patients thus represent only a segment of the people who could benefit from psychiatric care.

Mental health human resources

There are at present in Djibouti one psychiatrist, one chief nurse and six nurses or assistant nurses. All psychiatric assistance and care given is centralized in Djibouti city. There is no community-based psychiatric care.

Future plans

In order to cover the whole country effectively, a national mental health programme will have to use both the existing health infrastructure and the medical and paramedical personnel available. The problem that should be solved urgently is that of personnel training. This may be done efficiently, with limited means, by short-term courses at the department of psychiatry, Peltier Hospital. In addition to the training of psychiatrists, it is necessary to provide general practitioners with sufficient information on some aspects of psychiatry. This type of training may be conducted in short-term courses at the department of psychiatry.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is a paucity of epidemiological data on mental illnesses in Djibouti in internationally accessible literature. Mion and Oberti (1998) found that the prevalence of *khat* use among 100 army recruits was 84% with a mean consumption of 400 grams per chew. *Khat* abuse is believed to be common and associated also with other mental disorders (Mohamed, 2004).

Mental health resources

Mental health policy

A mental health policy is absent.

Substance abuse policy

A substance abuse policy is absent.

National mental health programme

A national mental health programme is absent. A national mental health programme is being formulated. This is expected to lead to the development of primary mental health care services, treatment facilities and human resources.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1997.

Mental health legislation

An old French legislation forms the basis of legal action. New legislation needs to be formulated. Details about the year of enactment of the mental health legislation are not available.

Mental health financing

There are no budget allocations for mental health. Details about expenditure on mental health are not available. The primary source of mental health financing is grants. The country does not have disability benefits for persons with mental disorders.

Mental health facilities

Mental health is not part of the primary health care system. Actual treatment of severe mental disorders is not available at the primary level. Mental health will be included with primary care in the new national mental health programme. Regular training of primary care professionals is not carried out in the field of mental health. There are no community care facilities for patients with mental disorders. Ambulatory care is available following hospitalization and for those for whom hospitalization is not deemed necessary.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.7
Psychiatric beds in mental hospitals per 10 000 population	0
Psychiatric beds in general hospitals per 10 000 population	0.7
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	0
Number of neurosurgeons per 100 000 population	0
Number of psychiatric nurses per 100 000 population	0.16
Number of neurologists per 100 000 population	0
Number of psychologists per 100 000 population	0
Number of social workers per 100 000 population	0

There are 4 nursing attendants. A Chinese psychiatrist is providing services temporarily. Psychiatric assistance is concentrated at the psychiatry department of Peltier Hospital. Besides that, psychiatric services are non-existent.

Nongovernmental organizations

Nongovernmental organizations are not involved with mental health in the country.

Information gathering system

There is a mental health reporting system in the country. Data up to 1999 are available. The country has no data collection system or epidemiological study on mental health.

Programmes for special populations

No specialized services exist. International organizations like the UNHCR provide help for refugees.

Therapeutic Drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, haloperidol. These drugs are available only at the general hospital and not at primary care level. None of the anti-Parkinsonian drugs are available.

Other information

Magico-religious treatment is present to a great extent. General knowledge about mental disorders is very limited.

Additional sources of information

Mion G, Oberti M. Epidemiologic study of khat use in the National Army of Djibouti. *Médecine tropicale*, 1998, 58:161–164.

Mohamed AK. (Focal point for mental health, Djibouti, Personal communication), 2004.

Egypt

Overview

The total area of Egypt is about 1 001 450 km², and the total population is 69.323 million (2004). In 2004, 42% of the population lived in urban areas. The population below 15 years of age and above 65 years of age is estimated at 37.8% and 3.4%, respectively (2003). The total adult literacy rate and the adult female literacy rate, is estimated at 61% and 50%, respectively (2003). The crude birth rate and the crude death rate are estimated at 25.8 and 6.4 per 1000 population, respectively (2004). Infant mortality is estimated at 23.2 per 1000 live births and under-5 mortality rate 29.6% per 1000 live births (2003). Total life expectancy is estimated at 70.6 years (2004). The maternal mortality ratio is 6.8 per 10 000 live births (2003). The per capita income is US\$ 1193 (2003) and the budgetary allocation for health represents 4.9% of the total and the per capita expenditure on health by Ministry of Health and Population is US\$ 21.5 as compared to the national per capita expenditure of US\$ 59 (2003). The rates per 10 000 population for physicians, dentists, nurses/midwives and hospital beds are 22.2, 3, 26.5 and 21.7, respectively (2003).

The health system is based on primary health care, which is provided through various health establishments such as maternal and child health centres, school health units and health offices, as well as rural and urban health centres. The Ministry of Health and Population has also tried to strengthen primary health care through establishing various training centres for primary health care health teams. Attention has been focused on renovating and developing health centres and re-equipping them with new

facilities. A new policy also dictates that all schools with 1000 pupils or more shall be provided with school health clinics; 80 of these clinics have already been established and 50 more are in the process of being set up.

Health planning in Egypt takes place through the planning department in the Ministry of Health and Population, in conjunction with the various technical units in the Ministry. Similar planning units also exist in the provincial health directorates. Local communities are involved through people's local councils at rural, urban and governorate levels. Since health plan drafts are initially prepared locally, the communities are involved in planning and finalizing these initial plans. They are also involved in the delivery and monitoring of services. The community also contributes to the financing of certain local health projects, as in the provision of land space for construction of health centres, or by paying minimal fees for services provided. Three bodies are responsible for coordinating and encouraging research: these are the health councils, and the Information Centre and the central department of research and development in the Ministry of Health and Population.

Mental health

Historical aspects

Egypt was one of the centres for the WHO project "Strategies for extending mental health care" (1975–81), which developed the initial programme to integrate mental health into primary health care. The national mental health programme of Egypt was developed in October 1986. A revised national mental health programme was prepared, following a review workshop in 1991.

Mental health facilities

Total facilities in the 27 governorates are as follows:

Facility	Total capacity (beds)	Working capacity	Number of patients
Abbassiya/Cairo	3000	2300	1992
Helwan	400	400	225
Heliopolis	120	120	80
Khanka	3000	2000	980
Banha	225	225	150
Tanta	120	120	120
Shobra Kass	15	15	12
Azazi	160	160	140
Harbit	40	---	---
Maamoura	800	800	740
El Tel El Kebir	40	40	20
Assiut	50	---	---
Aswan	36	36	6
High Dam	160	106	86
Bani Soueif	100	90	86
Total	8266	6412	4571

- There are psychiatric departments and outpatient clinics in the general hospitals in 19 governorates with a total of 621 beds.
- The psychiatric departments and outpatient clinics in the nine university teaching hospitals have a bed capacity of 10–30 beds each:

Cairo University	30
Ayn Shams University	20
Al Azhar University	20
Alexandria University	30
Tanta University	10
Mansoura University	30
Assiut University	10
Zagazig University	20
Banha University	10
Total	190

- Psychiatric departments and clinics for schools and university students are available in four centres in Cairo and one each in Alexandria, Qaliubiya, Tanta, Giza and Assiut. In governorates where no similar

facilities are available, two days are allotted to students in the psychiatric clinics.

- Special schools for education and rehabilitation of mentally retarded children (belonging to the Ministry of Social Welfare) are available in the following cities:
 - Cairo: four for boys and one for girls
 - Alexandria: one for boys
 - Tanta: one for boys
 - Minya: one for boys.
- There are seven private psychiatric hospitals in Cairo with a total capacity of about 760 beds.
- The number of psychiatrists in Egypt is about 600 and most of them are in Cairo, Alexandria or other big cities. There are 1355 psychiatric nurses, 241 clinical psychologists and 61 psychiatric social workers.

National mental health programme, legislation and related policies

Of the health budget, 9% is allocated to mental health activities. The national policy on substance abuse was formulated in 1986 as was the mental health programme. The mental health act dates back to the 1940s while the essential drugs list was updated in 1994.

The objectives of the national mental health programme are to make essential mental health care available and accessible for all in Egypt with special emphasis on the most vulnerable and inappropriately served populations; to enhance the use of mental health knowledge and skills to improve general health care; to enhance the use of mental health principles to promote social health and related functions including socioeconomic development and productivity as well as general quality of life; and to emphasize community participation as a goal as well as a means for achieving these objectives.

The strategies and approaches identified for the programme were establishment of a national coordination group for mental health; integration of essential mental health care into community health services starting with primary health care; extension of mental health care services involving active participation of all health personnel at all levels from specialists to primary health teams; strengthening of adequate referral services and

provision of relevant modalities of treatment, as seems appropriate; promotion of appropriate use of established health record (health card) and information system; provision of essential drugs for neuropsychiatric disorders; training in mental health for health personnel at different levels for better management of mental health problems; and integration of mental health care with social services and collaboration with other related sectors in the ministries of education, social welfare, religious affairs, justice and interior, as well as with private services and nongovernmental organizations.

Progress of national mental health programme

The mental health programme was revised in 1991 by a national committee. In more recent years, five hospitals were established with a total capacity of 651 beds were:

- Banha Mental Hospital, Qaliubiya governorate (225 beds)
- Azazi Mental Hospital, Sharqiya governorate (140 beds)
- High Dam Mental Hospital, Aswan governorate (106 beds)
- El Tel El Kebir Mental Hospital, Ismailiya governorate (40 beds) (since closed)
- Heliopolis Mental Hospital, Cairo governorate (120 beds).

Abassiya, Helwan and Khanka mental hospitals have recently been renovated. There has been an increase and expansion in mental health departments in the faculties of medicine.

Training courses have been organized on mental health for general practitioners and nursing staff working at basic health care units. In 1986–87, training was provided for 250 physicians and 250 nurses in the governorates of Assiut, Minya, Gharbiya and Suez.

In 1989, training was provided for 20 trainers in Ismailiya, so that they could later train general practitioners and basic health care unit staff in their governorates. In 1987, a mental health care manual for primary health care physicians was published, and in 1991, an integrated manual for basic health care units, which included a section on mental health, was published. During 1997, as part of the Nations for Mental Health programme, the Alexandria project was initiated, covering a population of about half a million.

Two districts in the governorate of Alexandria were chosen as test and control areas. In the test area, all general practitioners and nurses in primary

health care centres were trained, and selected responsibilities in mental health assigned to them. A referral and back-referral system was also established between these trained personnel and Ma'amoura psychiatric hospital. Pre-training knowledge and attitude tests were given. The aim was to integrate mental health with the activities of primary health care centres in the test area. Five courses of training covering 170 general practitioners have been given and the project is continuing. Over 300 personnel have been trained.

An integrated plan is being developed by the Ministry of Health and Population in order to reduce demand for drugs through intensive sensitization, treatment, follow-up and rehabilitation activities. Eighteen new laboratories for detection of addictive substances in biological secretions have been established, covering most governorates, and training was provided for the staff of these laboratories. The therapeutic services offered to addicts were expanded, and special departments were established for them within psychiatric hospitals. Legislation for drug control has been promulgated, such as the law on drugs passed by the People's Assembly (1989), the President's Decree establishing the National Fund for the Control of Drug Addiction and Abuse, and the joint decisions of the ministers of justice, social affairs and health establishing sanatoria and departments for the treatment of drug abuse and addiction. Along with these activities, information campaigns have been intensified in the media to upgrade awareness regarding drug hazards.

In 1989, mental health activities in schools were initiated in Alexandria. Manuals, teaching aids and health education materials have been developed to support the programme. Systematic research has focused on the impact of the training programmes in a pre- and post-training format, study of long-term sustenance of attitudes and skills and the impact of training on attendance in school health clinics. All these studies have shown the programme's usefulness.

Between 1989 and 1997, the following training programmes were organized:

- 31 one-week training courses for 1451 school health physicians
- 24 one-week training programmes for 800 maternal child health physicians

- 7 training programmes for 160 social workers at maternal and child health centres
- 60 training programmes for 3055 school social workers and teachers
- 2 training programmes for 160 school psychologists
- 4 advanced seven-week training programmes for physicians.

Currently, in Alexandria governorate, there are 23 guidance and counselling centres, 11 centres at maternal and child health facilities and two in paediatric hospitals.

In addition, there are two centres in Kafr El Dawar, one centre in Damanhour and one centre in Marsa Matrouh governorate. The High Institute of Public Health, University of Alexandria, has initiated mental health studies leading to a diploma, and masters and doctoral degrees.

Recent developments

A recent development in the mental health programme in Egypt is the long-term bilateral development programme between the Government of Egypt and the Government of Finland, which addresses the key problems of mental health care/mental welfare in Egypt. This programme includes curative aspects and prevention of mental diseases, as well as promotion of mental health. Based on the identified causes of problems, five components of interventions were outlined including: human resources development, functional development, structural development, community development, mental health promotion and prevention. The Government sees the mental health programme as an individual project but as part of the overall health sector reform. The overall objective of the programme is to improve mental welfare in Egypt.

The achievements of the programme so far are as follows.

- A human resource strategy for mental health was developed, training needs assessed and a resource base established.
- An activity to integrate mental health activities within the family health system was started by integrating mental health activities as part of the basic benefits package (BBP) in health reform and also integrating psychotropic drugs in the essential drugs list for primary health care. Guidelines and training curricula on mental health in primary health care were developed for physicians, nurses and social

workers/health educators. Training was conducted in five governorates with continuous follow-up and support. For the sustainability of the activities, a training-of-trainers programme was established.

- Activities for improving training in mental health in the undergraduate physician and nurse education curricula are in process.
- A continuing medical education programme was developed to cover mental health professionals. A capacity-building programme in mental health for nurses and for psychologists was developed, along with training of trainers in different mental health aspects for sustainability.
- Case management protocols and treatment guidelines were developed for schizophrenic and depressive patients.
- Improved management systems and practices in mental health care/services, e.g. medical record, nursing management and quality management systems, were instituted.
- A master plan for the provision of mental health services was developed, which is considered as a strategy for mental health in Egypt. The master plan includes levels of care, scope of services for each level of care, referral system, human resource requirements and physical infrastructure requirements.
- Development of intermediate services/facilities and other alternative approaches for psychiatric care, based on cost-benefit analysis, was planned.
- A programme to support the development/improvement of child psychiatric services in Abbasiya, Khanka and Maamoura hospitals, along with the establishment of the first day care centre for child psychiatry in Abbasiya hospital, was initiated.
- Two community-based mental health pilot programmes were started based on social marketing strategy and KAP study.

Implementation of the programme is based on the strategic principles of participatory approach, ownership, sustainable development, horizontal partnership, reflectivity, networking, collaboration with other programmes overlapping the mental health programme and continuous quality improvement.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Ghanem et al (2004) conducted a national household survey of prevalence of mental disorders in 5 governorates, using the Mini International Neuropsychiatric Interview-Plus (MINI-Plus). Almost 17% (11% to 25.4% in different governorates) of adults had mental disorders, with the common ones being mood disorders (6.4%), anxiety disorders (4.9%) and somatoform disorders (0.6%). Psychoses were seen in 0.3% of the population. Mental disorders were associated with gender (female), marital status (widow, divorced), occupation (housewife, unemployed), education (illiteracy), housing (overcrowding) and physical illnesses. Okasha et al (2001) assessed a sample of students, selected through multistage stratified random sampling with the General Health Questionnaire, the Arabic Obsessive Scale for obsessive traits and the Yale Brown Obsessive Compulsive Scale. They found that psychiatric morbidity was present in 51.7% and obsessive compulsive disorder (ICD 10) in 19.6%. Girls, younger adolescents and first-borns were likely to be affected to a greater extent. In a study of university students, Okasha et al (1985) found that almost 14% of students faced academic difficulties. Psychiatric disorders were diagnosed in 42% of male students with academic problems, compared to 9% of students with no such problems, with neuroses accounting for nearly half of the cases and schizophrenia for a quarter. Farrag et al (1998) examined 2000 elderly (above 60 years) subjects from a region in a 3-phase population-based study using a modified version of the MMSE and a standardized protocol for those who screened positive (MMSE score of 21 or below). The prevalence of dementia was 4.5% with Alzheimer in 2.2%, multi-infarct dementia in 0.9%, dementia of mixed type in 0.55% and secondary dementia in 0.45%. Age-specific prevalence tended to double every 5 years. Soueif et al (1982, 1990) reported on psychoactive drug use in a nationally representative sample ($n = 14\ 656$) of male secondary school students, using standardized questionnaires. They found that between 8% (for alcohol) and 21.4% (for synthetic drugs) of experimenters continued their drug use and that the age of onset was 12–16 years. A greater proportion of urban students used tobacco, alcohol and cannabis, and delinquency was associated with drug use. In another sample ($n = 5530$), they noted that consistently more arts

stream students in comparison to science stream students were immersed in the drug culture. In similar studies, Soueif et al (1986, 1987) examined the non-medical use of drugs among university students ($n = 2711$), using standardized tools. They found that university students were more likely to use stimulants and continue with drug use (10%–31% for different drugs) compared to male secondary school students, but the age of starting drug use was later in this sample. In comparison to male university students using drugs, female university student ($n = 2366$) who used drugs came from a higher socioeconomic background. They were less likely to use stimulants and narcotics or to smoke, and they started drug use later (usually after 16 years). Their preferred drugs were hypnotics, tranquilizers and alcohol. Nasser (1986, 1994) found lower rates of abnormal eating attitudes in college students in Cairo (12%) in comparison to those in London (22%). In the earlier study, no Arab student fulfilled criteria for an eating disorder, but in the later studies he found a prevalence rate of 1.2% for bulimia and 3.4% for partial syndrome of bulimia (Russel's criteria). Okasha and Lotaif (1979) estimated the rate of suicide attempts in Cairo to be 38.5/100 000 population based on their assessment of admissions for attempted suicide in one hospital. Among suicide attempters, those in the age group of 15-44 years and students were overrepresented. Depression, hysterical reactions and situational reactions were common psychiatric conditions associated with suicide. Overdosing was the commonest method (80%) used. Temtamy et al (1994) administered the Stanford-Binet test to 3000 randomly selected community subjects. The prevalence of mental retardation was 3.9% (higher rates were reported in rural areas). Parental consanguinity was established in 65%. Farrag et al (1988) assessed 2878 children from the 2nd and 3rd grades in elementary schools for their reading ability by means of standardized tests for linguistic ability and rate of letter identification. The 84 children (3%) with IQ 90 or more and no evidence of sensory or motor impairment identified as backward in their reading ability at this stage were reassessed after 3 years. Thirty-seven (1%) children, who did not attain satisfactory reading skills even at this stage, were diagnosed to have specific reading disability. The male to female ratio was 2.7 to 1. Abou et al (1991) administered the Arabic version of the Children's Depression Inventory to 1561 preparatory school children selected through stratified random

sampling and found the rate of depression to be 10.3%. Further testing in sub-samples revealed that depression scores were predicted by neuroticism, introversion, relationship with fathers, sibs and peers, scholastic performance and mothers' depression scores.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1978. The components of the policy are promotion, prevention and treatment. The objectives of the policy are to provide a basis for improving mental health and well-being of the population through provision of services to the population at risk, community care and family support.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1986. A President's Decree has established a National Fund for the Control of Drug Addiction and Abuse. The Supreme Council for the Control of Drug Addiction and Abuse is chaired by the Prime Minister. Laboratories for detection of addictive substances in biological secretions have been established in most regions. The policy direction is towards harm reduction.

National mental health programme

A national mental health programme is present. The programme was formulated in 1986. A new mental health programme was adopted in 2002. The programme aims to integrate mental health into community care, develop health recording and information gathering system, provide essential drugs and develop human resources. The other areas earmarked for development are quality assurance, development of intermediate and alternative systems of providing mental health care, developing child and adolescent psychiatry services, analysing the role of nongovernmental organizations, increasing awareness about mental health problems among the population and promoting mental health and preventing mental disorders.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. Details about the year of formulation are not available.

Mental health legislation

There is a Mental Health Act from the 1940s that is being revised. There is also a more recent law on narcotics which was formulated in 1989. Currently, efforts are being made to upgrade the law. The latest legislation was enacted in 1944. A code of practice was established in 2005.

Mental health financing

There are budget allocations for mental health. The country spends 9% of the total health budget on mental health. The primary sources of mental health financing in descending order are tax-based, out-of-pocket expenditure by the patient or family, social insurance and private insurances. The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is not available at the primary level. Psychiatry has been integrated in the primary health care services in line with the Health Reform adopted by the Ministry of Health. A system for referral between the different levels of care has been established.

Regular training of primary care professionals is carried out in the field of mental health. In the past two years, about 639 personnel were trained. Manuals for mental health care for primary care physicians and basic health care units are available. Training facilities are present. Training courses have been organized for general practitioners, maternal child health physicians, social workers and nursing staff working at basic health units. Training courses have also been held for trainers. Evaluation of training programmes for general practitioners showed significant improvement in attitudes, knowledge and skills regarding mental disorders and drug misuse and their management.

There are community care facilities for patients with mental disorders. Intermediate services were started for both patients with chronic mental disorders and drug use disorders. Large mental hospitals are trying to place long-stay patients in and follow them up in the community.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.3
Psychiatric beds in mental hospitals per 10 000 population	1.1

Psychiatric beds in general hospitals per 10 000 population	0.1
Psychiatric beds in other settings per 10 000 population	0.1
Number of psychiatrists per 100 000 population	0.9
Number of neurosurgeons per 100 000 population	0.2
Number of psychiatric nurses per 100 000 population	2
Number of neurologists per 100 000 population	0.5
Number of psychologists per 100 000 population	0.4
Number of social workers per 100 000 population	0.1

There are few occupational therapists. Almost four-fifths of psychiatric beds are in Cairo. Beds for treatment of drug abusers and forensic patients are available. Specific allocations of beds have not been made for child and adolescent mental health. In an effort to provide quality assurance in big mental hospitals, standards have been developed and quality assurance teams have been deployed. Most psychiatrists have their own private clinics. There is a permanent training centre for continuous in-service training of mental health professionals, particularly nurses, psychologist and social workers employed in mental health facilities.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention and rehabilitation. The Child Mental Health Prevention Association, a nongovernmental organization, was established in 1995, to spread the concept of mental health among families. There are also guidance and counselling centres at different governorates.

Information gathering system

There is a mental health reporting system in the country. The country has no data collection system or epidemiological study on mental health. A new National Health Information System for Mental Health was developed by the Ministry of Health and Population. The General Secretariat of Mental Health is piloting a data collection system.

Programmes for special populations

The country has specific programmes for mental health for disaster affected populations, elderly and children. Outpatient clinics and day care centres for children and adolescents are present in some mental hospitals.

Clinics for school and university students are available in four centres. Eight special schools for education and rehabilitation of mentally retarded children are available. Of these, one caters to girls. Under the aegis of the school mental health programme, training programmes for school teachers, school physicians and school supervisors are undertaken, orientation courses for adolescents are held and special clinics at district levels are conducted in the area of mental health and drug misuse.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: phenobarbital, amitriptyline, diazepam. Imipramine is available in primary health care centres (commonest strength: 25 mg, approximate cost for 100 tablets: US\$ 9.45).

Other information

Finland has provided support to the mental health programme in Egypt since 2002. The programme addresses five main components: human resource development, functional development, structural development, community development and mental health prevention and promotion. UNODC supports some activities for improving treatment services and rehabilitation of drug abusers.

Additional sources of information

Abou Nazeel MW et al. A study of depression among Alexandria preparatory school adolescents. *Journal of the Egyptian Public Health Association*, 1991, 66:649–674.

Daoud R, Atallah S, Loza N. Psychiatric services in Egypt - an update. *International psychiatry*, 2002, 2:12–14.

Farrag AF, el Behary AA, Kandil MR. Prevalence of specific reading disability in Egypt. *Lancet*, 1988, 2:837–839.

Farrag A et al. Prevalence of Alzheimer's disease and other dementing disorders: Assiut-Upper Egypt study. *Dementia and geriatric cognitive disorders*, 1998, 9:323–328.

Ghanem M, Gadallah M, Mourad S et al. *National survey of prevalence of mental disorders in Egypt*, 2004, WHO sponsored study (under publication).

Country profile for mental health services. Cairo, Mental Health Programme in Egypt, 2003. (heshmat1@egymen.com)

Master plan for provision of mental health services in Egypt. Mental Health Programme in Egypt, 2003. (heshmat1@egymen.com)

Nasser M. Comparative study of the prevalence of abnormal eating attitudes among Arab female students of both London and Cairo universities. *Psychological medicine*, 1986, 16:621–625.

Nasser M. Screening for abnormal eating attitudes in a population of Egyptian secondary school girls. *Social psychiatry and psychiatric epidemiology*, 1994, 29:25–30.

Okasha A. Mental health in the Middle East: an Egyptian perspective. *Clinical psychology review*, 1999, 19:917–33.

Okasha A et al. A psychiatric training programme for general practitioners in primary health care in Egypt. *Primary care psychiatry*, 2002, 8: 9–16.

Okasha A et al. Academic difficulty among male Egyptian university students. I. Association with psychiatric morbidity. *British journal of psychiatry*, 1985, 146: 140–144.

Okasha A, Lotaif F. Attempted suicide. An Egyptian investigation. *Acta psychiatrica Scandinavica*, 1979, 60: 69–75.

Okasha A et al. Prevalence of obsessive compulsive symptoms (OCS) in a sample of Egyptian adolescents. *Encephale*, 2001, 27: 8–14.

SouEIF MI et al. The extent of drug use among Egyptian male university students. *Drug and alcohol dependence*, 1986, 18: 389–403.

SouEIF MI et al. The extent of nonmedical use of psychoactive substances among secondary school students in Greater Cairo. *Drug and alcohol dependence*, 1982, 9: 15–41.

SouEIF MI et al. The use of psychoactive substances by female Egyptian university students, compared with their male colleagues on selected items. *Drug and alcohol dependence*, 1987, 19: 233–247.

SouEIF MI et al. Use of psychoactive substances among male secondary school pupils in Egypt: a study on a nationwide representative sample. *Drug and alcohol dependence*, 1990, 26: 63–79.

Temtamy SA et al. An epidemiological/genetic study of mental subnormality in Assiut Governorate, Egypt. *Clinical genetics*, 1994, 46: 347–351.

Report on the intercountry meeting on the evaluation of the progress of national mental health programmes in the Eastern Mediterranean Region, Casablanca, Morocco, 22–26 May 1995. Alexandria, World Health Organization, Regional Office for the Eastern Mediterranean, 1996.

Report on the intercountry consultation on mental health legislation in different law traditions, Kuwait, 29 September–2 October 1997. Alexandria, World Health Organization, Regional Office for the Eastern Mediterranean, 1999.

Report on the intercountry meeting on the mental health needs assessment at the community, health services and policy levels, Teheran, Islamic Republic of Iran, 7–10 September 1997. Alexandria, World Health Organization, Regional Office for the Eastern Mediterranean, 1998.

Islamic Republic of Iran

Overview

The Islamic Republic of Iran, with a surface area of 1 648 000 km², has a population of 66.775 million (2004). Of this, 28.4% is below the age of 15 years and 5% above 65 years (2003). About 61% of the population reside in urban areas (2004). Life expectancy at birth is 69 years (2000). The literacy rate for the adult population is 79% and the female literacy rate is 73% (2002). The crude birth rate is estimated at 18.1 per 1000 population, crude death rate 4.4 per 1000 population, infant mortality rate 36 per 1000 live births (2002), and under-5 mortality rate 36 per 1000 live births (2000). Life expectancy at birth is 69 years and maternal mortality is estimated at 3.7 per 10 000 live births. The per capita income in 2002 was US\$ 1745. The budget of the Ministry of Health and Medical Education is 8% of the national budget and 6% of gross national product. The Ministry of Health and Medical Education's per capita expenditure is US\$ 104, compared to the US\$ 171.4 spent per capita on health. In 2001, there were 11.1 physicians, 2.1 dentists, 16.1 nursing/midwifery personnel and 16.3 hospital beds per 10 000 population. Available health facilities by January 1999 comprised 14 936 health houses, 2332 rural health centres, 2007 urban health centres, 271 district health centres and 422 health posts, which are the equivalent of health houses in urban areas.

Development of health system

Since 1979 the country's health policy has been based on primary health care, with particular emphasis on expansion of health networks and

programmes in rural areas and with priority allotted to preventive rather than curative services.

More attention has been given to reduction of population growth by use of family planning; control of diarrhoeal, respiratory and iodine deficiency diseases; integration of mental health, tuberculosis, leprosy, diabetes and malaria programmes into the primary health care system; community-oriented medical education; increase of immunization coverage; reduction of maternal and infant mortality; increase of community participation; increase of basic environmental sanitation and adequate safe water in rural communities; and expansion of health networks, including the construction of district hospitals where needed. There is also a policy of vaccination of women, which requires that all women of childbearing age, not only pregnant women, be immunized against tetanus.

In both towns and villages, the first point of contact between the public and the health system is the health centre. However, in the villages, the health centre performs its functions with the help of a large number of health houses, which effectively become the first point of contact. The responsibility of the rural health centre is to supervise, support and accept referrals from the health houses.

District hospitals in towns offer services to referred cases from rural as well as urban health centres. District hospitals are responsible for specialized, inpatient and outpatient curative services. The activities of the district health centres, as well as those of the district hospitals, are coordinated by the manager of the health network who administers the district health activities. Although, formally, this referral follow-up chain exists, it is somewhat weak, especially between the second and specialist level.

National health policies are decided at meetings of the Council of the Undersecretary of the Ministry of Health and Medical Education, headed by the Minister of Health and Medical Education. In each district, there is a district planning council, to which each sector submits its planning needs in priority order. The plans approved by this council are referred for formal consideration to the provincial council, which, with due consideration of provincial priorities, coordinates the plans and ultimately sends them to the planning councils at the national level. In each province of the country, there

is at least one university of medical sciences and health services. The chancellor of this university is in charge of all health affairs in the province, executing his or her duties through deputies for health, treatment, and so on. He or she also works with the deans of different health-related schools.

The health network has been decentralized to district level so that implementation of programmes is independent of central administrative and financial control. The communities are actively involved in the planning and implementation of health services, mainly through the health councils in rural areas. Public health and primary health care now account for 13% of the medical curriculum.

Mental health

The history of development of mental health services in the country can be divided into four periods.

The period of asylum care, covering most of the early decades of this century. Asylums of different sizes existed in Teheran, Hamadan, Shiraz and Isfahan. The condition of these facilities were very poor, and most of them were either part of or extensions of areas where beggars congregated for alms. Teheran's municipality opened the first government-supported asylum in the 1930s.

The second phase involved the introduction of psychiatry as a part of medical education and the formation of new university hospitals. This period started in the late 1940s. Residency training in psychiatry started during the early 1960s in Teheran University's Roozbeh Hospital. It was then followed by similar programmes in Shiraz, Isfahan, Tabriz and Mashhad universities.

Community mental health programmes started in the 1970s. The Society for the Rehabilitation of the Disabled headed by a senior deputy of the Ministry of Health and Welfare was established and planning for community mental health started. This organization introduced the concept of comprehensive mental health care. It initiated the building of new hospitals and centres in the provinces, started a wide range of epidemiological research, and established specialized level training programmes for psychiatry and psychiatric nursing. After 1979, training and research programmes of this society were integrated to form the Teheran Psychiatric Institute.

The period of integration of mental health services into the primary health care system started in the mid 1980s. The first pilot projects were started in 1987 in Shahr-e-Kord and Shahreza followed by integration throughout the country. This programme was evaluated by an independent expert group from WHO in 1995.

Mental health facilities

- Number of psychiatric beds:
 - public (Ministry of Health and Medical Education and universities of medical sciences): 6575
 - public sector psychiatric wards in general hospitals: 796
 - private: 310
 - welfare: 2000
 - other (military, etc.): 571
 - total: 9456.
- Number of psychiatric hospitals: 23
- Number of private psychiatric clinics: 485
- Number of private clinical psychology offices: 255.

Mental health human resources

- Number of psychiatrists: 800
- Number of registered psychiatry residents (under training) every year: 55–63
- Number of PhD clinical psychologists: 60
- Number of MSc clinical psychologists: 400
- Number of BSc psychologists in health services: 600
- Number of MSc psychiatric nurses: 35
- Number of psychiatric social workers: 175

Mental health training

There are 39 medical schools in the country, most of which are affiliated with regional universities and function directly under the Ministry of Health and Medical Education. There are also a number of medical schools that are affiliated with the Islamic Azad University, which is a tuition-dependent, semigovernmental higher education system with schools

throughout the country. Only one or two schools belong to other sectors, such as the military. All these medical schools have undergraduate training in behavioural sciences and psychiatry. Ten medical schools, all belonging to the government sector, offer psychiatry residency programmes for 55–65 candidates a year. The certification process is done through Iranian Board of Medical Specialities, which is a national body functioning under the supervision of the deputy minister of health and medical education for educational affairs. The examiners come from all the universities that have psychiatric training. Only the ones who are certified by the board can become faculty members of medical schools. In 1997, board certification in child psychiatry with a two-year training period after basic certification was started.

One centre in the country offers postgraduate psychiatric nursing training towards an MSc degree. Three centres offer the same degree in clinical psychology. There are 6–10 psychiatric nursing graduates a year. There are about 25 clinical psychology graduates a year, and almost all of them continue to work in mental-health-related areas.

National programme of mental health, legislation and related policies

Of the health budget, 3% is used for mental health activities. The national programme of mental health was formulated in October 1986 by a multidisciplinary team of professionals and was consequently adopted by the Ministry of Health and Medical Education. The implementation of this programme started in 1987. The narcotics and substance abuse policy was formulated in 1987, while the therapeutic and essential drugs policy was formulated in 1988.

The objectives of the mental health programme are:

- to make essential mental health care available and accessible to all in the Islamic Republic of Iran in the near future, with special emphasis on the most vulnerable, unserved and underserved rural population as well as the unprivileged, inappropriately served population in deprived urban areas and in remote parts of the country

- to develop mental health care models in keeping with the culture and social structure of Iranian society and to encourage community participation in the development of mental health care services
- to enhance mental health knowledge and skills in general health care and to encourage the wider application of mental health principles to promote social health, socioeconomic development as well as improving the quality of life
- to develop suitable programmes for the mental health care of those affected by war (such as immigrants, homeless, disabled, bereaved, mentally ill) as well as to have a long-term plan for post-war mental health problems.

The strategies identified include service strategies, training strategies, administrative strategies and promotion of mental health and war-related services. The national mental health programme document also identifies clear objectives for implementation. The period 1987–97 can be divided into two periods namely, the period of pilot programmes (1987–90) and the period of expansion (1990 to date).

The first pilot programmes were implemented in 1987 in Shahr-e-Kord district in Chahar Mahal-e-Bakhtiari province and Shahreza district in Isfahan province in the central part of the country. Later on, a third pilot programme started in Hashtgerd, Teheran province. These pilot projects provided both the experience as well as the practical details of integration of mental health into primary health care. Following the pilot projects, a number of developments occurred in the country that led to the expansion of the programme rapidly in the rural areas. These were:

- creation of a mental health unit within the Ministry of Health and Medical Education
- formation of a national mental health advisory group
- involvement of the medical universities in the national mental health programme
- declaration of mental health as the ninth component of primary health care
- preparation of a manual for *behvarz* (rural health worker), a manual for doctors and an information system, and training for all health personnel

- celebration of a mental health week every year in October
- review of workshops on the national programme (1991) and research methodology (1993)
- international independent evaluation (1995)
- seminars and conferences
- public mental health education through the mass media and other sectors
- establishment of general hospital psychiatric wards
- urban mental health and school mental health programmes.

As a result of all these efforts, there was a rapid expansion of the mental health programme. As of January 2000, about 15.6 million (23%) of the total population were covered. Of this, 12 million are in the rural areas, which constitutes over 50% of the rural population. The programme covers 8494 health houses, 1554 health centres and 199 districts. The total number of patients seen is 128 425, of which 13 900 are psychotic or what is characterized in the programme as major mental illness, 23 500 epileptics, 28 800 mentally retarded, 47 900 neurotic or what is categorized in the programme as minor mental illness and 14 200 miscellaneous. Over 20 000 personnel have been trained. The current nationwide coverage is about 23%.

Prevention of mental disorders

Special programmes for the war-affected population, school mental health and urban mental health have been developed in the country. In addition, mental health professionals have contributed to the overall development of rehabilitation services.

Research

During the past 10 years, an impressive amount and wide range of research has been undertaken by professionals. The most important of these was the evaluation of the community mental health programmes at Shahr-e-Kord, Shahreza and Hashtgerd.

Independent evaluation

In November 1995, an independent evaluation was undertaken of the national mental health programme by an international group of five

consultants. This evaluation included special studies, field visits and a national workshop.

The special studies provided information about mental health care and the way the programme is perceived by the personnel. The salient findings are as follows.

- *Behvarz*. A total of 266 *behvarz* were studied. The results show that more than half of the *behvarz* scored above 50% in the total knowledge and attitude scores. On average, about 15 patients were identified by each *behvarz* as suffering from mental health problems at health houses covering an average population of 1500. A majority of the patients were provided care at the health houses by the visiting general practitioner and the *behvarz* of the area.
- Rural health centres. The rural health centre is the health care level where diagnosis and treatment are provided by general practitioners. Of the psychiatric patients seen at rural health centres, most were referred from health houses. There were more direct referrals of persons with “minor psychiatric morbidity” as compared to other diagnostic groups. The doctors provided care for a number of psychiatric emergencies. The most common difficulties reported by the doctors in providing mental health care were follow-up of cases, diagnosis, duration of treatment, and side effects and dosage of medicine. A one-day census showed that rapid turnover of doctors at the primary health care level, with an average stay of only 3–6 months for each doctor, often led to many of them not having specific mental health training and becoming fully involved in the programme.
- District health centres. These centres are staffed by psychiatrists or general practitioners trained in psychiatry and one psychologist. About 25% of the mentally ill persons seen at the district health centre are patients with psychoses and about 20% each with neuroses, mental retardation and epilepsy. There is a regular process of referrals and back-referrals at different levels of health care. The need for referrals to specialized psychiatric centres is relatively small.
- More than 40 professionals and planners from different disciplines and departments reviewed the evaluation findings and outlined the

programme for the next phase of the national mental health programme for the period 1996–2001.

Programmes for the mental health care of those affected by war

Four foundations are responsible for the care of different aspects related to post-war conditions. Mental health care is an important aspect, which is the point of attention concerning the affected individuals in war-related psychiatric conditions, as well as primary health care for their families.

Counselling centres

In the 1990s more than 80 counselling centres were developed and established in medical and other universities, 20 by welfare organizations; 10 private counselling centres were also established. Twenty centres offer telephone counselling, and a hotline is also operational for clients.

Religious affairs and mental health

Many activities have been done to use religious resources in the field of mental health. Research units in this area exist in the Iran, Tabriz, Isfahan, Kerman and Mashhad universities of medical sciences and many studies, conferences and researches have been done.

Healthy city initiative in Teheran

The need for provision of services in urban areas has been felt for a long time, and innovative activities have been initiated in urban areas. One such activity has been the introduction of a mental health component to “healthy city” projects, which are basically environmental projects. The main objective is to provide necessary mental health services to urban, suburban and slum dwellers using the vehicle of healthy city projects, including neighbourhood health volunteers. Attitudes and knowledge tests of the community and volunteers were done by mental health experts working with the project managers. The same team performed a prevalence study for case findings for the initiation of this project. The project is active in prevention activities and the promotion of mental health. Patients are referred to general practitioners or, when need exists, specialists.

Child mental health

In Teheran, Iran, Shahid Beheshti and Teheran universities of medical sciences are involved with child psychiatry and mental health services for children. Child mental health facilities include 30 beds in Imam Hossein Hospital (Shahid Beheshti University), with an outpatient clinic three days every week, an inpatient and outpatient family therapy unit, and a speech therapy unit. There are 20 beds in Navab Hospital (Iran University), with an outpatient clinic two days every week. There are also outpatient clinic services and a family therapy unit in Roozbeh Hospital (Teheran University).

There are three child psychiatrists in Imam Hossein Hospital, one in Navab Hospital and three in Teheran University. Child psychiatry services are starting in Isfahan University of Medical Sciences as well.

Child mental health training programmes consist of education for medical students and internships, specialized child psychiatry courses (about three months), hands-on training in outpatient clinics, and two-year child psychiatry courses in Shahid Beheshti University.

One of the programmes in child psychiatry that is proceeding is the pilot special project in school mental health in the Damavand area in northeast Teheran.

Mental health week

Mental health week has been celebrated in the third week of October since 1985. Mental health week seminars are held in nearly all district and provincial health centres. The goal of this programme is to change the prevalent, popular attitudes, and to attract popular attention and support for mental health promotion in the country.

Recent developments

Expansion of urban coverage

Since most of the progress in integrating mental health in primary health care happened in rural areas, despite the expansion of urban population, in recent years more stress has been put on urban mental health. The coverage in urban areas by health volunteers almost doubled during the past five years. Health volunteers, mostly ordinary housewives, having received training by the health system, provide basic health training and

services. Another urban project has been initiation of demonstration projects of home care for mentally ill patients. These projects were initiated in 2004, some within the universities and some with the collaboration of nongovernmental organizations. Another achievement was the issuing of a decree by the Ministry of Health and Medical Education that provincial mental health experts who work under the supervision of the mental health unit are allowed to inspect the mental hospitals. They have recently developed a checklist to make an objective evaluation possible.

Suicide prevention

Interventions started in four cities in 2001. The main component of the package was training of general practitioners. Suicide rates were reduced in all four cities, and the programme has been expanded to 10 cities.

Mental health promotion

A life skills training programme, which was first piloted in Shahid Beheshti Medical University and the State Welfare organization in the late 1990s, was developed into a national initiative in the Ministry of Health and Medical Education starting in 2003. A national programme was developed and training manuals and video CDs prepared for all levels. All provincial mental health focal points were trained as trainers in 2003. The long term plan is to cover all 16.5 million students in 5 years. A very serious intersectoral coordination is under way. Capacity-building has also started for parenting skills training, and all mental health focal points have been trained in all 40 medical universities.

Disaster mental health

Seven years ago, in Shahid Beheshti Medical University with the collaboration of the mental health unit of the Ministry of Health and Medical Education, the Iranian disaster mental health programme started with a needs assessment of survivors of two earthquakes in Birjand and Ardabil. This highlighted the need for psychosocial intervention in natural disasters. Based on these studies, a national plan was developed. Human resource development was started and integration of the new plan with the ongoing national mental health infrastructure was initiated. Red Crescent relief workers and psychologists and psychiatrists from all disaster prone

provinces were trained in training-for-trainers workshops and the programme was implemented after the Qazvin earthquake as a pilot.

After the Bam earthquake in which about 30 000 people died, a comprehensive psychosocial intervention was started for survivors. In the immediate post-phase (the first 2 weeks) information dissemination and tracing was done. During the next phase, which lasted for about one year, tent visits, initial psychosocial support, screening were carried out and more professional psychosocial support was provided. Over 80 000 survivors in more than 20 000 tents or temporary settlements received initial psychosocial support, and over 40 000 received more professional group trauma counselling and other comprehensive services. There were also activities in schools and recreation centres for children, public meetings and activities aimed at special groups. Health volunteers were trained for psychosocial empowerment of the people. They started rebuilding the social networks and providing social support to the services. The Iranian experience has been unique in terms of being comprehensive and providing satisfactory coverage.

At present in every province trained people are prepared for interventions on disaster mental health and there is a “future package” including all the material needed for such interventions in the mental health unit of the Ministry of Health. Such preparations were shown to be effective when, one year after the Bam earthquake, another earthquake in Zarand was managed even more efficiently.

Other recent activities have been advocacy for mental health which led to a 10-fold increase in the budget of the unit in 2004, child abuse prevention and prevention of violence against women.

Harm reduction

Injecting drug use has been a major area of public health concern, characterized by concentrated HIV epidemics among injecting drug users and prisoners in certain provinces. Injecting drug users accounted for 60.8% of all HIV cases reported to the Ministry of Health and Medical Education, and 94.8% of the reported cases are among men. Recognizing the potential magnitude of the problem, a comprehensive prevention and care response has been started targeting drug users both in the community and in prisons.

The National AIDS Committee was formed in 2001. In order to reduce the harms related to injecting drug use and to prevent the spread of HIV/AIDS among injecting drug users, the National Harm Reduction Committee was formed as a sub-committee in 2002. Currently, the Director of the Office for AIDS and Hepatitis at the Centre for Disease Control at the Ministry serves as its secretary. The Substance Abuse Prevention and Treatment Office in the Ministry plays a crucial role in the committee. There is multi-sectoral collaboration between various sectors, notably the Ministry of Health and Medical Education, Drug Control Headquarters Secretariat, National Welfare Organization, National Prisons Organization and law enforcement representatives as well as Iranian Red Crescent Society. Nongovernmental organizations in harm reduction for drug-using populations have played a major role as well. All this has led to a better coordination of harm reduction activities throughout the country. A five-year plan (2002–2007) for substance use-related harm reduction interventions was prepared. The objectives of the plan include establishing, consolidating, strengthening and coordinating multisectoral, multilateral harm reduction interventions; and reducing drug injecting related harms such as bacterial infections, crime, injecting-related mortality, HIV, hepatitis and other blood-borne virus infection.

More recently, protocols and guidelines for establishing government and private methadone maintenance treatment clinics and guidelines for establishing and operating outreach programmes, drop-in centres and shelters for drug users have been prepared. In addition, the Substance Abuse Prevention and Treatment Office created the Iranian National Centre on Addiction Studies at Tehran University of Medical Sciences in 2003 to carry out a range of tasks, including ongoing research into the effectiveness of harm reduction interventions. All this has created an evidence-based framework for prevention, care and support for injecting drug users.

Key among important accomplishments in HIV/AIDS prevention and care implementation are:

- Establishment of a large number of Triangular Clinics, providing services related to drug users, STI services and care and support for people living with HIV/AIDS with the Ministry delivering a sound

infrastructure for providing care and support for people living with HIV/AIDS

- Acceptance of methadone maintenance treatment as an important drug treatment and HIV prevention component for opiate-using populations, and plans for enhanced delivery at a variety of settings, including closed settings such as prisons
- The establishment of Triangular Clinics in the prison system for providing care and support to HIV-positive prisoners
- HIV information, safe sex education, and health education related to HIV targeting all prisoners in Iranian prisons.

The health sector of the Iranian Prisons Organization must be commended for its harm reduction efforts within prisons and drug rehabilitation centres. Harm reduction services in prisons include individual and group health education, risk reduction information, risk reduction counselling, provision of condoms, and voluntary HIV counselling and testing, with methadone maintenance treatment available in certain prisons. Harm reduction is proceeding alongside other preventive and promotional activities including life skills training and parenting skills training run by the Mental Health Office of the Ministry, Ministry of Social Welfare, Ministry of Education, the media and many other public sectors and nongovernmental organizations.

Summary update (*Mental health atlas*, 2005)

Epidemiology

According to the most recent epidemiologic survey (Noorbala et al, 2004) which used the General Health Questionnaire (GHQ-28) ($n = 35\,014$), 21% of the population (25.9% of the women and 14.9% of the men) were identified as likely to be suffering from mental illness. Interview of families by general practitioners revealed that the rates of mental retardation, epilepsy and psychosis were 1.4%, 1.2% and 0.6%, respectively. Bash and colleagues (Bash and Bash-Liecht, 1978; Bash 1984) reported on psychiatric-epidemiological surveys (based partly on census studies, partly on random samples) that sampled rural, urban, tribal subjects above 6 years. The surveys employed questionnaires and tests in the screening phase and individual psychiatric examinations of all possible cases in the confirmation

phase. Prevalence in various settings for any psychiatric disorder was: rural (14.9%), urban (16.6%), tribal (2.1%); for all psychoreactive cases (included in the foregoing): rural (8.7%), urban (9.8%), tribal (1.2%); for all psychosomatic cases (included in the psychoreactive): rural (1.7%), urban (2.3%), tribal (0.9%). Significant sex differences were found only in the poor strata. Alemi (1978) found the prevalence of opium use disorders in a survey of randomly chosen households from a rural community to be 6.9% in comparison to the rate of 1.1% estimated for the population based on registry of patients. Merchant et al (1976) found that 24% of university students ($n = 607$) reported life time use of drugs with 11% reporting use more than three times in their lives. The majority of drug users had used marijuana (54%). Use of drugs was significantly associated with sex, age, number of years of university attended and father's education. In another study of university students ($n = 501$), Ahmadi and Yazdanfur (2002) reported that the prevalence of regular current use of various substances was: cigarettes (36.1%), alcohol (21.4%), opium (7.6%) and cannabis (3.0%). Substance use was significantly higher among males. Ahmadi and Javadpour (2001) found that among randomly selected health care students ($n = 346$), 34.7% used substances at some point in time. Almost 6.9% of the students were current regular users of substances (cigarettes: 5.5%, alcohol: 1.7%, opium: 1.4%, cannabis: 1.2%, heroin: 0.3% and LSD: 0.3%). Use of substances was significantly related to gender (11.3% of males and 1.4% of females were current regular users). Agahi and Spencer (1982) found that among 712 students aged 14–18 years, 11% had used some drugs of which opium was the commonest, followed by marijuana and heroin. Thornicroft and Sartorius (1993) reported the ten-year follow-up data of the WHO Collaborative Study on Depression ($n = 439$). Almost 18% had very poor clinical outcome, 24% had severe social impairment for more than half of the follow-up period and 21% had no full remissions. The best clinical course (one or two reasonably short episodes of depression with complete remission between episodes) was more common in endogenous depression (65%) in comparison to psychogenic depression (29%). A fifth (22%) had at least one episode lasting for more than 1 year, and 10% had an episode lasting over 2 years during follow-up. Death by suicide occurred in 11% of patients, with a further 14% making unsuccessful suicide attempts. Shokrollahi et al (1999) administered

a sexual function questionnaire to 300 healthy married women (16–53 years old) attending a family planning centre. Approximately 38% of the women had at least one sexual dysfunction; the common ones were inhibited desire (15%), inhibited orgasm (26%), lack of lubrication (15%), vaginismus (8%) and dyspareunia (10%). There were significant correlations between sexual dysfunction in women and their knowledge (low) and attitude (conservative) towards sexuality and their husbands' sexual dysfunction. Nobakht and Dezhkam (2000) conducted a two-stage study to assess eating disorders in 3100 schoolgirls in the age group of 15–18 years using the Farsi translation of the Eating Attitudes Test (EAT-26), the Eating Disorder Diagnostic Inventory and a supplementary clinical interview. The lifetime prevalence of anorexia nervosa, bulimia nervosa and partial syndrome was 0.9%, 3.2% and 6.6%, respectively. Zarghami and Khalilian (2002) conducted interviews and/or psychological autopsies on 318 cases of self-burning. Self-immolation was associated with young age (average: 27 years), female gender (83%), housewife status, high school education, psychiatric (95%, mostly adjustment disorder) and chronic physical illnesses (30%) and high mortality (79%).

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1986. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation. Community education is a component of the policy.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1987. Alcohol is prohibited by both religion and legislation.

National mental health programme

A national mental health programme is present. The programme was formulated in 1986. The national mental health programme was evaluated in 1995 and 1997 and changes were made based on suggestions. In 1995, it was evaluated jointly by the WHO and the Teheran Psychiatric Institute. Recently, different sub-programmes on service delivery in urban areas,

prevention and promotion have been added to the main body in accordance with the population shift and change of priorities. Other related programmes are Integration of Substance Abuse Prevention within the Primary Health Care and a Harm Reduction Programme.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1988. The essential drugs list was last updated in 2001.

Mental health legislation

Although there are different laws regarding the mentally ill, there is no modern mental health legislation. Since last year, a team has been working on a draft for a new legislation. A mandate by the Minister of Health was issued in 1997 to allocate 10% of all general hospitals to psychiatry beds. The Mental Health Department has recently started a nationwide advocacy campaign to implement this mandate. Details about the year of enactment of the mental health legislation are not available.

Mental health financing

There are budget allocations for mental health. The country spends 3% of the total health budget on mental health. The primary sources of mental health financing in descending order are tax-based, out-of-pocket expenditure by the patient or family, social insurance and private insurances.

The National Health Service in Iran is funded by the Government and health insurance. If covered by health insurance, patients pay 25% of the fee for outpatient and 10% of the fee for inpatient treatment (consultation, laboratory investigations or medicines). Fees do not vary across age ranges. All emergencies are treated immediately without prior payment. The private sector can accept patients without insurance but it provides a limited range of services and the fees are high. Psychologists cannot send bills to insurance companies directly.

The country has disability benefits for persons with mental disorders. Since 2001, disabled mentally ill patients are entitled to a stipend of about US\$ 30 per month if they do not receive other free services. Already, about 10 000 disabled patients are receiving disability benefits and the number is increasing. Institutional care is free of charge for the disabled mentally ill.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. Mental health delivery for severe illnesses is one of the objectives in rural and deprived areas.

Regular training of primary care professionals is carried out in the field of mental health. In the last two years, about 20 185 personnel were trained. Mental health services at the primary care level are available to more than one-fifth of urban and more than four-fifths of the rural population. *Behvarz* (multipurpose health workers), who are selected from the target community, have a pivotal role in the country's primary health care network. Their training lasts two years and equips them for active case finding, appropriate referral to the general practitioner and active follow-up of the patients. Psychologists are playing a vital role at the level of primary health care and supervision of health houses. Postgraduate training facilities for medical and nursing graduates are available. Training facilities for general physicians and mental health workers (or *behvarz*) is also present. Manuals for the training of medical doctors and *behvarz* are available. A difficulty noted in the provision of primary mental health care was the rapid turnover of doctors at this level (average stay of 3-6 months), which often led to many of the posted doctors not having specific mental health training. To keep up with the urban shift in population, neighbourhood health volunteers are being trained for preventive and promotive activities and appropriate referral.

There are community care facilities for patients with mental disorders. Mental health is integrated into the primary care system whose basis is community care. Community participation is sought through involvement of nongovernmental organizations and religious establishments in mental health care and public education (e.g. during mental health week).

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.6
Psychiatric beds in mental hospitals per 10 000 population	1.4
Psychiatric beds in general hospitals per 10 000 population	0.2
Psychiatric beds in other settings per 10 000 population	0.04
Number of psychiatrists per 100 000 population	1.19

Number of neurosurgeons per 100 000 population	0.4
Number of psychiatric nurses per 100 000 population	0.5
Number of neurologists per 100 000 population	0.6
Number of psychologists per 100 000 population	2
Number of social workers per 100 000 population	0.6

Among the other 325 professionals are occupational therapists and medical assistants. Facilities for treatment of drug abusers (300 beds) and re-orientation centres for drug abusers with criminal and social problems are available. At least 100 beds are available for children with behavioural disorders. Board certification in child psychiatry with a two-year additional training period is available. There is no requirement for licensure or certification of clinical psychologists and they do not have prescription privileges. There are numerous psychologists working outside the mental health sector. Guidelines have been developed and refresher/training workshops have been held for physicians, nurses and social workers on demand-reduction issues.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy and promotion. In 2004, many joint activities between the Department of Mental Health and Nongovernmental organizations were started on prevention, promotion and homecare for mentally ill patients.

Information gathering system

There is mental health reporting system in the country. There is a simple information system for mental disorders like psychosis, depression, epilepsy, mental retardation, etc.

The country has no data collection system or epidemiological study on mental health. The Department of Mental Health recently started collecting national data on mental health with collaboration of the National Health Research Center. A national epidemiological study on mental health was done in 1999 (Noorbala, 2004) as an adjunct to the periodic National Health Survey.

Programmes for special populations

The country has specific programmes for mental health for disaster affected populations and children. Although the mental health programme caters to all populations, since 2003, children and adolescents have been receiving more attention.

There are special facilities for child and adolescent psychiatry in the form of special departments, training facilities, school mental health programmes. Special projects on school mental health and on prevention of child abuse and violence against women (in collaboration with UNICEF and WHO) are under way. Life skills training has gained impetus and cascade training of main focal points in all provinces was accomplished in 2003. Four foundations provide special services ranging from consultation to rehabilitation to populations affected by war. Under the national programme on mental health interventions in natural disasters, more than 70 000 survivors received planned interventions during the 8 months after Bam earthquake and over 400 psychiatrists/psychologists and 1500 teachers were trained. Pilot projects on suicide prevention, under way in four cities have shown promising results. Integration of substance abuse prevention within primary health care and harm reduction activities including methadone maintenance and outreach activities for street drug users has been launched with collaboration of the Ministry of Health and Higher Education and Nongovernmental organizations.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, biperiden. In 2003, the list was amended to include 32 medications, e.g. nortryptiline, fluoxetine, trihexiphenedyl, risperidone, etc.

Additional sources of information

Agahi C, Spencer C. Patterns of drug use among secondary school children in post-revolutionary Iran. *Drug and alcohol dependence*, 1982, 9:235–242.

Ahmadi J, Benrazavi L. Substance use among Iranian nephrologic patients. *American journal of nephrology*, 2002, 22:11–13.

Ahmadi J, Javadpour A. Assessing substance use among Iranian healthcare students. *Journal of substance use*, 2001, 6:196–198.

Ahmadi J, Yazdanfar F. Current substance abuse among Iranian university students. *Addictive disorders and their treatment*, 2002 1:61–64.

Alemi AA. The iceberg of opium addiction. An epidemiological survey of opium addiction in a rural community. *Drug and alcohol dependence*, 1978, 3:107–112.

Bash KW. Epidemiology of psychosomatic disorders in Iran. *Psychotherapy and psychosomatics*, 1984, 42:182–186.

Bash KW, Bash-Liechti J. Psychiatric resurvey of a central Iranian village thirteen years later. *Nervenarzt*, 1978, 49:713–719.

Ghobari B, Bolhari J. The current state of medical psychology in Iran. *Journal of clinical psychology in medical settings*, 2001, 8:39–43.

Hashemi N, London M. Psychiatric practice in the Islamic Republic of Iran and the United Kingdom. *Psychiatric bulletin*, 2003, 27:190–191.

Merchant NM, et al. Factors related to drug abuse among Iranian university students. *Pahlavi medical journal*, 1976, 7:516–528.

Nobakht M, Dezhkam M. An epidemiological study of eating disorders in the Islamic Republic of Iran. *International journal of eating disorders*, 2000, 28:265–271.

Noorbala AA, Bagheri Yazdi SA, Yasamy MT et al. Mental health survey of the adult population in the Islamic Republic of Iran. *British journal of psychiatry*, 2004, 184, 70-73.

Shadpour K. Primary health care networks in the Islamic Republic of Iran. *Eastern Mediterranean health journal*, 2000, 6: 822–825.

Shokrollahi P et al. Prevalence of sexual dysfunction in women seeking services at family planning centres in Tehran. *Journal of sex and marital therapy*, 1999, 25: 211–215.

Thornicroft G, Sartorius N. The course and outcome of depression in different cultures: 10-year follow-up of the WHO Collaborative Study on the Assessment of Depressive Disorders. *Psychological medicine*, 1993 23: 1023–1032.

Yasamy MT et al. Mental health in the Islamic Republic of Iran: achievements and the areas of need. *Eastern Mediterranean health journal*, 2001, 7: 381–391.

Yasamy MT et al. Disaster mental health in Iran. In: *Disaster mental health in Asia*. New Delhi, Indian Red Cross (in press).

Zarghami M, Khalilian A. Deliberate self-burning in Mazandaran, Islamic Republic of Iran. *Burns*, 2002, 28:115–119.

Iraq

Overview

The surface area of Iraq is about 435 052 km². The population is estimated at 26.563 million, of whom 75% live in urban areas (2004). The majority of Iraqis are Muslims (95%) with a small minority of Christians and others. The percentage of the population below 15 years of age and above 65 years is 46.3% and 3.0%, respectively (2003). The total adult literacy rate and the female adult literacy rate in 1995 were estimated at 56% and 43%, respectively (2000). Infant mortality rate in 2003 was estimated to be 107 per 1000 live births, maternal mortality ratio 29.4 per 10 000 and under-5 mortality rate 130 per 1000 live births. In 2003, the life expectancy at birth was estimated to be 63.2 years for the total population.

Iraq's per capita gross national product in 2003 was US\$ 721, and 1.5% of gross national product was allocated for health. There are 6.2, 1.2, 12.1 and 13.3 physicians, dentists, nurses/midwives and hospital beds respectively per 10 000 of the population (2003).

Iraq's health policy focuses on reducing infant, child and maternal mortality through the following strategies: providing maternal and child health services in all health centres; decreasing mortality from diarrhoeal disease through the use of oral rehydration therapy; decreasing infant mortality through ameliorating obstetric and postnatal services; decreasing child mortality due to respiratory diseases; increasing safe water and sanitation coverage; and increasing immunization coverage. The primary health care approach has been strengthened in the community and in the

various professional cadres through primary health care councils at different levels.

The primary health care councils, which are made up of representatives from the health authorities and other government and nongovernmental organizations (with community support), supervise and monitor the activities of primary health care. A primary health care council also exists at the central level, headed by the Minister of Health and comprising senior officials from the Ministry of Health, other ministries, the Central Population Council, the General Federation of Iraqi Women, the Farmers' Union and the Labour Union.

Mental health

A brief historical note

One of the earliest facilities for the care of the people afflicted with mental illnesses was established in Baghdad during the middle ages. Ironically, in a country with such a tradition of care, since 1990, mental health care, like many other aspects of the care for the population has been badly affected by war and embargo.

Mental health facilities

Psychiatric hospitals and units in general hospitals form part of the specialized services that represent the third level of mental health care. There are 23 psychiatric facilities in the country, 16 in Baghdad. Six are university-based departments, and the Ministry of Health runs all facilities.

Al Rashad Mental Hospital, established in 1956 in Baghdad, is a long-stay institution with a forensic psychiatry unit. It has bed strength of 1300, of which 300 are forensic psychiatry beds.

Ibn Rushd Psychiatric Hospital is a short-stay hospital with 74 beds (established in 1968). It is located in Baghdad. There is also an attached drug dependence centre with 15 beds, established in 1979.

The psychiatric units in general hospitals have bed strengths of 20 beds. These units are located at the Baghdad Teaching Hospital (30–40 beds), Al Yarmouk Teaching Hospital (12 beds), Al-Kademia Nahrain Medical College (20 beds), Mosul General Hospital (30 beds), Basra General Hospital (30 beds) and Al Najaf General Hospital (30 beds).

There are 12 schools and institutes for the mentally retarded, under the supervision of the Ministry of Labour and Social Affairs.

There are outpatient psychiatric clinics in all the general hospitals. In addition, the mental health component of the general medical services is being developed, and general practitioners and medical assistants are receiving specialized mental health training.

There are a few community care facilities such as the homes for the elderly in Baghdad and Mosul and institutes for homeless children and orphans.

Mental health human resources

There were 160 consultant psychiatrists, 10 psychiatric social workers and 20–30 psychiatric nurses, approximately half in Baghdad. Most psychiatrists in Iraq have private clinics, through which supportive psychotherapy, medication and electroconvulsive therapy services are available.

Mental health training

A postgraduate programme leading towards a full qualification in psychiatry (Iraqi Board in Psychiatry and Arab Board in Psychiatry) is available with 10 positions per year at five centres. A new two-year MSc course in clinical psychology started in 1994 in Baghdad. There are two courses of training for psychiatric social workers conducted annually.

As far as the teaching of paramedical personnel is concerned, graduates from the University Nursing College in Baghdad have good theoretical and practical training in psychiatry, but all other health workers (nurses from the nursing schools, medical assistants and auxiliaries) receive only theoretical training in psychiatry.

All medical schools provide undergraduate teaching in mental health care during the two years of basic sciences. There are about 15 hours of lectures in psychology. During the three years of clinical teaching, there are about 30 hours of lectures in psychiatry. During the fifth and sixth years, some 60 hours of clinical training is given on the wards to groups of eight to ten medical students at a time. During the internship period (2 years),

rotation in psychiatry is obligatory for one month, while another 3 months in psychiatry are optional.

National mental health programme, legislation and related policies

The narcotics and substance abuse policy was formulated in 1965 while the therapeutic and essential drugs policy was formed in 1986. The national mental health programme was formulated in 1989 and is based upon the following principles: mental health care and promotion are components of primary health care; mental health care and promotion should be delegated from the specialist to the general health worker, mental health care and promotion activities need stronger decentralization; and mental health care and promotion must be integrated with other health care and social services.

The overall objective of the national programme is integration of mental health care and promotion with general health care in order to improve the mental health of the whole population of Iraq. The more specific approaches towards this goal are: strengthening central coordination of mental health care and promotion and bringing together the resources of various sectors of Iraqi society; decentralization of mental health care and its integration with general health care; renovation and reinforcement of the existing mental health services; develop an information system to facilitate collection of reliable information on mental health problems and services being offered; and promotion of mental health research.

Coordination of mental health care

The Iraqi Committee for Mental Health Promotion is an advisory body to the Minister of Health. It consists of five consultant psychiatrists; one of them chairs the Committee.

Mental health legislation

Fragments of mental health legislation exist in the civil and criminal codes of Iraq. These have been consolidated and expanded into a draft

mental health act. This draft was reviewed and updated recently, and it is in the final stage of legislation. Currently the public health act 89/1981 governs mental health-related issues.

Progress

A wide range of training programmes were undertaken as part of the national mental health programme during 1996 and 1997: 648 primary health care physicians, 462 nurses and 625 educational administrators and school teachers were trained in mental health. In addition, courses for training for teachers and social workers working in special schools and institutions for mentally handicapped children, hostels for the elderly and reform schools were conducted. Also, two or three courses per year were conducted in Baghdad and in every governorate for physicians working at primary health care, along with training in mental health for nursing, education, literature, arts and medical technology institutes.

Research

The Ministry of Higher Education and Scientific Research has a research body for medical research. During the past few years, studies have been completed on prevalence of child psychiatric disorders; prevalence of psychiatric disorders in medical, surgical wards and outpatients; problems of drug and alcohol abuse; clinical and epidemiological aspects of mental disorders.

Recent developments

The two years (2004–2005) of mental health initiatives by the Ministry of Health, Iraq and WHO have demonstrated both the need for mental health care as well as viable and practical approaches to meet the needs. The achievements are:

- establishing a National Council for Mental Health to guide the mental health and substance abuse programmes
- mental health needs assessment using the WHO-AIMS; this provides baseline data as well as the basis for the identification of priorities

- 10 psychiatrists trained for 3 months in psychiatric specialties in the United Kingdom
- rebuilding of seven psychiatric facilities
- building of a new psychiatric facility in Erbil
- construction of two 8-bed facilities in Najaf and Nasiriya
- 20 medical officers trained in psychiatry for work in governorate hospitals
- 20 male psychiatrists trained in research methodology
- 17 research projects providing information about the magnitude of the mental health problems in specific population groups and the impact of mental disorders in terms of quality of life of ill persons
- 40 psychiatric nurses trained in psychiatry for 6 weeks
- 20 nurses to be trained in psychiatry for 3 months
- 25 professionals provided one week psychiatry update training
- improving the skills of teachers of undergraduate medical education in psychiatry
- initiatives for addressing substance abuse problems
- public awareness campaign material on mental health for use with the general population
- psychological first aid services to the general population and school children
- integration of mental health care with general health services
- involvement of voluntary organizations in mental health care
- revised mental health act and substance abuse legislation.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Ahmad et al (1998, 2000a) developed the Iraqi version of the Posttraumatic Stress Symptoms in Children (PTSS-C) screening instrument and applied it to a group of children affected by a mass-escape tragedy in Kurdistan; they found the prevalence rate of PTSD to be 20% according to DSM-III-R criteria. PTSD symptoms reduced at 4 month follow-up but were again high at 14 and 26 month follow-up. Dyregrov et al (2002) interviewed a group of 94 children, who had been exposed to a bombing that killed more than 750 people, at 6 months, 1 year and 2 year intervals with the help of

selected items from different inventories, including the Impact of Event Scale (IES). The children continued to experience sadness and remained afraid of losing their family. Although there was no significant decline in intrusive and avoidance reactions as measured by the IES from 6 months to 1 year following the war, reactions were reduced 2 years after the war. However, the scores were still high, indicating that symptoms persist, with somewhat diminished intensity over time. Ahmed et al (2000b) interviewed randomly selected 45 pairs of children and their caregivers (mostly mothers) in two displacement camps in Kurdistan with the help of PTSS-C and the Harvard Trauma Questionnaire (HTQ). PTSD was reported in 87% of children and 60% of their caregivers. Childhood PTSD was significantly predicted by child trauma score and the duration of captivity, but was unaffected by maternal PTSD. It did not disappear after the reunion with the PTSD-free father. In a 1-year follow-up study, Ahmad and Mohamad (1996) found that children in orphanages showed greater behavioural symptoms and PTSD compared to children in foster care. Yasseen and Al-Musawi (2001) and Hamamy et al (1990) performed karyotypic analyses on children suffering from severe mental retardation and Down syndrome. The former study showed that while two-thirds of patients had chromosomal abnormalities, only 10% had recognizable syndromes. In the latter study, 81.9% of children with Down's syndrome were shown to have trisomy 21 and 18.1% to have 46/47 + G type of mosaic. Examination for parental consanguinity revealed that 77.9%, 16.2% and 5.9% of the trisomy 21 cases and 53.3%, 26.7% and 20.0% of the mosaic cases were from non-consanguineous, first-cousin and second-cousin marriages, respectively. Amin-Zaki et al (1978, 1979) studied 32 infants exposed to methylmercury exposure over a 5 year period. In nine cases of cerebral palsy, methylmercury exposure occurred only during the last trimester or post-natally via suckling. Whereas the mother's symptoms usually improved, the damage to the fetal nervous system appears to be permanent. Milder cases (minimal brain damage syndrome) previously not identified in other studies were also reported. The syndrome consists of varying degrees of developmental retardation in addition to exaggerated tendon reflexes and the pathologic extensor plantar reflex.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1981. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1965.

National mental health programme

A national mental health programme is present. The programme was formulated in 1987. The national mental health programme was started in 1989 and is concerned primarily with the integration of mental health with primary care leading to improvement of the mental health status of the country. Promotion of proper research facilities and information gathering systems are also a part of the programme. Coordination of mental health is done by the Iraqi Committee for Mental Health Promotion, an advisory body to the Minister of Health. In 2004, an advisory body called the National Council for Mental Health was established in the Ministry of Health, which is working to formulate/implement a mental health policy, a mental health legislation, a substance abuse policy and a national mental health programme.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1986.

Mental health legislation

There is a Public Health Act (No. 89/1981). This includes mental health issues. A draft of new mental health legislation was approved by Cabinet in October 2004 and has been submitted to the Government for approval. The last legislation was enacted in 1981.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of

mental health financing in descending order are tax-based and out-of-pocket expenditure by the patient or family.

The country has disability benefits for persons with mental disorders. The services provided by the Government are free, though payment has to be made for private services.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is available at the primary level. Drugs are supplied to needy patients at the primary care level after confirmation of the diagnosis by specialists.

Regular training of primary care professionals is carried out in the field of mental health. Postgraduation in psychology and training for paramedical staff is also present. Training is also provided to teachers, social workers employed in special schools, primary care physicians and nurses. General practitioners in the primary health centres are being trained in psychiatry in order to deliver better psychiatric services at the primary level. Short training courses for orientation are provided.

There are community care facilities for patients with mental disorders. Care is provided through the facilities of the Ministry of Social Welfare.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.63
Psychiatric beds in mental hospitals per 10 000 population	0.55
Psychiatric beds in general hospitals per 10 000 population	0.06
Psychiatric beds in other settings per 10 000 population	0.02
Number of psychiatrists per 100 000 population	0.7
Number of neurosurgeons per 100 000 population	0.09
Number of psychiatric nurses per 100 000 population	0.1
Number of neurologists per 100 000 population	0.04
Number of psychologists per 100 000 population	0.05
Number of social workers per 100 000 population	0.2

There are approximately 300 beds for forensic psychiatry and 15 beds for treatment of drug dependence. Approximately half of mental health professionals are based in Baghdad. Most psychiatrists have private clinics.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, prevention, treatment and rehabilitation. Training facilities are also provided by nongovernmental organizations. The Iraqi Society of Psychiatrists, which is a nongovernmental organization, is actively involved in the promotion of mental health. The Iraqi Mental Health Foundation UK focuses on training and academic liaison in the post-war situation. The Red Cross helped in the rehabilitation of Al-Rashad Mental Hospital in Baghdad, which was seriously damaged by mobs during the regime change period in 2003.

Information gathering system

There is a mental health reporting system in the country. The country has no data collection system or epidemiological study on mental health. There is a lack of proper information gathering system and monitoring of existing mental health services is not possible due to lack of operational data and other information.

Programmes for special populations

The country has specific programmes for mental health for refugees, disaster affected population, elderly and children. Special services are limited in scope. There are 12 schools for the mentally handicapped. In addition, some homes for the elderly and institutes for homeless children and orphans are available.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, levodopa. The drug supply is erratic and new generation drugs are lacking.

Additional sources of information

Ahmad A, Mohamad K. The socioemotional development of orphans in orphanages and traditional foster care in Iraqi Kurdistan. *Child abuse and neglect*, 1996, 20:1161–1173.

Ahmad A, Mohamed HT, Ameen NM. A 26-month follow-up of posttraumatic stress symptoms in children after the mass-escape tragedy in Iraqi Kurdistan. *Nordic journal of psychiatry*, 1998, 52:357–366.

Ahmad A et al. Reliability and validity of a child-specific cross-cultural instrument for assessing posttraumatic stress disorder. *European child and adolescent psychiatry*, 2000a, 9:285–294.

Ahmad A et al. Posttraumatic stress disorder in children after the military operation ‘Anfal’ in Iraqi Kurdistan. *European child and adolescent psychiatry*, 2000b, 9:235–243.

Amin-Zaki L et al. Methylmercury poisoning in Iraqi children: clinical observations over two years. *British medical journal*, 1978, 1:613–616.

Amin-Zaki L et al. Prenatal methylmercury poisoning. Clinical observations over five years. *American journal of diseases of children*, 1979, 133:172–177.

Dyer O. British Iraqi doctors set up charity to support Iraq's mental health services. *British medical journal*, 2003, 327:832–833.

Dyregrov A, Gjestad R, Raundalen M. Children exposed to warfare: a longitudinal study. *Journal of traumatic stress*, 2002, 15:59–68.

Hamamy HA, Al Hakkak ZS, Al Taha S. Consanguinity and the genetic control of Down syndrome. *Clinical genetics*, 1990, 37:24–29.

Yasseen AA, Al-Musawi TA. Cytogenetics study in severely mentally retarded patients. *Saudi medical journal*, 2001, 22:444–449.

Jordan

Overview

Jordan, with a land area of 89 440 km², lies east of the River Jordan. About 80% of the land area of Jordan is desert. The population is concentrated in the northern and central highlands where the rainfall is sufficient to support cultivation. The population is estimated at 5 617 000 and the proportion of the population below 15 years and above 65 years of age is 37.1% and 3.5%, respectively. The adult literacy rate and the female adult literacy rate are estimated to be 90% and 85%, respectively. Infant mortality rate is estimated at 22.1 per 1000 live births and under-5 mortality rate 27 per 1000 live births (2002). Life expectancy at birth is 71.5 years (2003). The crude birth rate per 1000 population is 29. Maternal mortality ratio is estimated at 4.0 per 10 000 live births (2004). The per capita gross national product is US\$ 1773 (2004). The Ministry of Health budget represents 6% of the national budget, comprising 2.6% of gross national product. The per capita expenditure by the Ministry of Health is US\$ 165 (2004). There are 22.4, 7.3, 32.5, and 17 physicians, dentists, nurses/midwives and hospital beds per 10 000 of the population, respectively (2004).

The constitution of Jordan states that it is the responsibility of the government to make health available to all citizens. There is political commitment at the highest level to achieving the goal for health for all. The Higher Health Council was established by law and is headed by the Prime Minister; its membership comprises representatives of the various health sectors. This council plays a major role in health planning and in adopting new health strategies.

Three sectors remain the main providers of health in the country, namely the public, the private and the international donor agencies. The public sector is composed of the Ministry of Health (which is the principal provider), the Royal Medical Services (for armed forces), the University of Jordan and the social security organization. The private sector provides services through 29 hospitals with 1563 beds in addition to private outpatient clinics and the facilities run by the nongovernmental organizations. The international sector includes the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) and other UN bodies, as well as foreign charity organizations.

The Ministry of Health provides services through a series of primary health care centres and district hospitals. Each of the districts is self-sufficient in services, and referrals to the capital and other large cities are made only for cases needing specialized tertiary care.

Monitoring and evaluation are conducted at the national level. A standard format for monitoring and evaluating the activities of primary health care exists and is used for assessment purposes. Various training courses, including the leadership development programme organized by WHO, have been made available for the purpose of increasing the managerial capabilities of staff working at the Ministry of Health.

Primary health care committees have been formed at the level of the health centre and are composed of members of the community. These committees meet regularly in order to identify needs and problems and find solutions. Representatives from these primary health care committees are also members of the Higher Health Council and other councils concerned with health. Communities are also involved in the provision of resources through donation of buildings or plots of land for health centres.

Health education is included in school educational curricula in order to increase awareness of health problems. In addition, health education as a separate subject has been included in the curricula of nursing and paramedical staff. Moreover, the time allocated to the various health education programmes in the mass media has been increased. Nongovernmental organizations also contribute to the implementation of health strategies by coordinating with the Ministry of Health on various projects.

When extensive development projects are initiated, a committee is formed made up of representatives from the health and other sectors to determine the effect of such projects on health; for example, the effect of major irrigation projects on the spread of schistosomiasis, or that of various industrial projects on environmental pollution.

The national health plan is part of the socioeconomic development plan and is implemented through a health system based mainly on primary health care. Efforts have been made to orient the private sector towards primary health care by drawing up contracts with physicians in the private sector, making them responsible for performing primary health care duties such as immunization, maternal and child care services, and registration of vital statistics, with occasional referral to health centres for diagnostic purposes. The physicians' contracts also bind them to work in any geographic or medical catchment area specified by the Ministry of Health.

Existing health centres offer primary health care to 95.5% of the community, and 86.1% of the population can reach these centres in less than 30 minutes.

Mental health

Historical aspects

Mental health services in Jordan reflect the various changes in the history of the country. Until 1966, mental health services in Jordan were delivered through only one mental hospital in Bethlehem, covering both East and West Banks. After the 1967 war, patients on the East Bank had no access to the services of this hospital. Hence, the Ministry of Health established a 60-bed mental hospital at Fuhais, just outside Amman, with a specialized clinic three days a week. In 1987, the National Centre for Mental Health was opened in Amman to provide mental health services. In 1987, a national committee was formed for the development and implementation of the national programme of mental health.

Mental health facilities

The mental health services in Jordan consist of the National Centre for Mental Health, with 200 beds, and two public mental hospitals with 390 beds, at Fuhais and Na'our, south of Amman. The National Centre for

Mental Health has the additional role of promoting training of hospital residents, nurses, social workers, psychologists and medical students. In addition, the Royal Medical Services mental health unit offers 40 beds, and there is one day-care centre and one rehabilitation centre. There are 31 psychiatric clinics in cities and towns all over the country, 22 of which are in the private sector. Establishment of psychiatric units in general hospitals has yet to be implemented. There are two private hospitals with a total of 118 beds and two geriatric homes with a total of 200 beds.

Mental health human resources

There are 70 psychiatrists in the country. Of these, 12 work under the health ministry, 3 in the academic departments, 22 in the private sector and the rest in other sectors. There are 13 psychologists working for the mental health services. Of these, 8 have BS degrees, 3 have MS degrees, and 2 have PhDs. There are only eight psychiatric nurses. There are 26 social workers in the mental health services. In addition, there are over 300 educational psychologists working in the Ministry of Education. There is a psychiatry residency programme with two positions in the University of Jordan Medical School.

Medical undergraduates receive 120 hours devoted to psychiatry, and the clinical training consists of clinical work and internship.

National mental health programme, legislation and related policies

A national programme of mental health was formulated by a national committee and discussed in a national workshop in Amman in July 1988 but was adopted in 1994. A policy on therapeutic and essential drugs was formulated in 1988 while a narcotics and substance abuse policy was adopted in 2000. A psychiatric special committee is reviewing the Jordan Mental Health Act. There is also a special committee of the Ministry of Justice planning the amendments to the sectors relevant to mental health in Jordanian criminal law, Jordanian civil law and the Jordanian law of correct procedures. Currently chapters 49, 50 and 51 of the common law deal with mental health.

The mental health programme objectives are integrating mental health services therein; preventing mental disorders and promoting public awareness in this respect; and treating mental cases in a more efficient and less costly way. The national mental health programme also outlined the service strategies, training strategies, management strategies and strategies for mental health promotion.

It was envisaged that by 1995 the national mental health programme would provide diagnostic aids in at least 50% of the health centres in the country; establish mental health sections in 50% of public hospitals; establish mental guidance centres in 50% of schools; initiate a programme for mental health promotion; include psychosocial components in the health curricula of educational institutions; and provide rehabilitation centres for at least 50% of the mentally handicapped in the country. Some progress has been made in implementation of these goals. At present, the mental health programme is integrated to the work of some primary health care centres. Of course, as it is true for all the countries of the Region, further attempts are needed.

Progress of the national mental health programme

Since the formulation of the national mental health programme, 105 general physicians and 70 nurses have been trained in mental health care. A school mental health programme has been initiated. Preventive activities have been implemented through primary health care centres, schools and the mass media. Mental health has been promoted through disseminating information to the public, primary health care physicians and leading health administrators.

The problem of drug abuse and dependence is an important priority and it is being tackled in collaboration with other sectors as a national strategy.

A major problem has been the limited human resources. Many professionals seek vacancies with better salaries in neighbouring countries while others move to the private sector. Therefore, there is a shortage of qualified psychiatrists in the Ministry of Health. The problems in implementing rehabilitation and occupational therapy efficiently stem from a lack of continuous financial support as well as a lack of experts in this field.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Al Jaddou and Malkawi (1997) administered an Arabic version of the General Health Questionnaire (GHQ-28) to 794 primary care patients and found the prevalence of psychiatric morbidity to be 61%. Multiple logistic regression analysis revealed that unemployment and perceived severity of physical illness were positively correlated with psychiatric disorders. Haddad and Malak (2002) interviewed randomly selected cluster samples drawn from medical and engineering colleges ($n = 650$) using the modified Arabic version of the WHO Smoking Questionnaire and the Attitudes towards Smoking Questionnaire. The prevalence of smoking was 28.6% (50.2% among males and 6.5% among females). Smoking commenced after 15 years of age in four-fifths of the cases. Warren et al (2000), who conducted the Global Youth Tobacco Survey, reported that tobacco use in the surveyed age group ranged from 10% to 33% in various countries. Oweis (2001) interviewed about 280 primiparous women with no previous history of psychiatric illness and complicated pregnancy and child birth using a number of standardized and locally validated tools including the Edinburgh Postnatal Depression Scale (EPDS). They found high rate of postpartum depression. The prevalence of postpartum depression was associated with perceived stress of childbirth, having a girl child, years of education and income and giving birth in a public or military hospital (as against a private hospital, which was perceived as less stressful). Shuriquie et al (1999) assessed 201 female nursing students (17–21 years) with the Arabic version of the Abnormal Eating Attitude Scale. They found abnormal eating attitudes and over-concern with food and body image in 12.4%. Abnormal attitudes were inversely correlated with socioeconomic status. Daradkeh (1989) found that the annual suicide rate during 1985–1990 was 2.1 per 100 000. The peak suicide rate was in the age group 15–34 years. The majority of males who committed suicide were single and either unemployed or unskilled manual workers. Over two-thirds of females who committed suicide were either housewives or students. Nearly two-thirds of the total population that committed suicide had previous psychiatric treatment. Violent methods of suicide were most frequently used. Abu al-Ragheb and Salhab (1989) reported that during the 13-year period (1973–1985) at least 329 deaths in

Jordan resulted from poisoning by pesticides (organophosphates: 93.6%) of which 61% were due to self-ingestion. Three fifths of the suicides were in the 15–24 year age group. Significantly fewer parasuicides were reported during Ramadan than the month preceding it and the month that follows Ramadan (Daradkeh, 1992). Kharabsheh et al (2001) reported on a mass psychogenic illness involving more than 800 young people who believed they had suffered from the side-effects of DPT vaccine administered at school; 122 of them were admitted to hospital. The media, the children's parents and the medical profession played a role in the escalation of this mass reaction. Janson and Dawani (1994) examined 2528 children aged 0–7 years representing 95% of a catchment area. Almost 7.8% had a disability or a chronic disease. Severe mental retardation was one of the commonest disabilities.

Mental health resources

Mental health policy

A mental health policy is absent. A draft for the mental health policy had been prepared in 1986, but is still to be implemented.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 2000.

National mental health programme

A national mental health programme is present. The programme was formulated in 1994. The national mental health programme aims to integrate mental health into public health and to promote mental health awareness. It also outlines service strategies, training strategies and management and promotion strategies.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1988.

Mental health legislation

Chapter 49/50/51 from the Law of Common Health is regarding the compulsory admission to psychiatric hospitals. The latest legislation was enacted in 2003.

Mental health financing

There are no budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are tax-based and out-of-pocket expenditure by the patient or family.

The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is available at the primary level. There have been initiatives to train general physicians and nurses on aspects of mental health care.

Regular training of primary care professionals is carried out in the field of mental health. In 2003–2004 about 160 personnel were trained.

There are no community care facilities for patients with mental disorders. Psychiatrists now cover health centres in 5 regions. Psychological counselling centres have been established in the main schools.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.57
Psychiatric beds in mental hospitals per 10 000 population	1.4
Psychiatric beds in general hospitals per 10 000 population	0.08
Psychiatric beds in other settings per 10 000 population	0.07
Number of psychiatrists per 100 000 population	1
Number of neurosurgeons per 100 000 population	0.2
Number of psychiatric nurses per 100 000 population	2
Number of neurologists per 100 000 population	0.3
Number of psychologists per 100 000 population	0.6
Number of social workers per 100 000 population	2

Prior to 1966, there was only one mental hospital in Bethlehem. After the 1967 war, patients on the East Bank did not have access to the services of the hospital and so a new 60-bed mental hospital was constructed and in

1987 the National Centre for Mental Health was opened. A day care centre and a rehabilitation centre are there. Recently, a 46 bedded centre for treatment of drug abuse was created. Although there are 3000 psychologists and 2000 social workers only a few work in the field of mental health. Many professionals seek vacancies with better salaries in neighbouring countries, while others move to private sectors. Among military psychiatrists, two have a diploma in forensic psychiatry and one in child psychiatry (they were trained in the UK). Clinical psychologists have to obtain a licence from the Ministry to practice.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in promotion and rehabilitation.

Information gathering system

There is a mental health reporting system in the country. The country has no data collection system or epidemiological study on mental health.

Programmes for special populations

The country has specific programmes for mental health for elderly and children. Two homes for the elderly with a capacity for 200 elderly individuals are under construction. As a part of the national mental health programme, an initiative has been taken to start a school mental health programme.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, biperiden. Sinemet is available instead of carbidopa and levodopa (it combines 25 mg of the former and 250 mg of the latter). The cost per 100 tablets is US\$ 0.47.

Additional sources of information

Abu al-Ragheb SY, Salhab AS. Pesticide mortality. A Jordanian experience. *American journal of forensic medicine and pathology*, 1989, 10:221–225.

Al Jaddou H, Malkawi A. Prevalence, recognition and management of mental disorders in primary health care in northern Jordan. *Acta psychiatrica Scandinavica*, 1997, 96:31–35.

Daradkeh TK. Suicide in Jordan 1980-1985. *Acta psychiatrica Scandinavica*, 1989, 79:241–244.

Daradkeh TK. Parasuicide during Ramadan in Jordan. *Acta psychiatrica Scandinavica*, 1992, 86:253–254.

Haddad LG, Malak MZ. Smoking habits and attitudes towards smoking among university students in Jordan. *International journal of nursing studies*, 2002, 39:793–802.

Janson S, Dawani H. Chronic illness in preschool Jordanian children. *Annals of tropical paediatrics*, 1994, 14:137–144.

Kharabsheh S, Al-Otoun H, Clements J et al. Mass psychogenic illness following tetanus-diphtheria toxoid vaccination in Jordan. *Bulletin of the World Health Organization*, 2001, 79:764–770.

Oweis AI. Relationships among the situational variables of perceived stress of the childbirth experience, perceived length and perceived difficulty of labor, selected personal variables, perceived nursing support and postpartum depression in primiparous Jordanian women living in Jordan. Widener University School of Nursing, 2001.

Shurique N. Military psychiatry—a Jordanian experience. *Psychiatric bulletin*, 2003, 27:386–388.

Shurique N, Elias T, Abdulhamid M. A study of abnormal eating attitude among Jordanian female college students. *Bahrain medical bulletin*, 1999, 21: 88–90.

Takriti A. Psychiatry in Jordan. *International psychiatry*, 2004, 5:9–11.

Warren CW, Riley L, Asma S et al. Tobacco use by youth: a surveillance report from the Global Youth Tobacco Survey project. *Bulletin of the World Health Organization*, 2000, 78:868–876.

Kuwait

Overview

Kuwait has a surface area of 17 818 km². Kuwait's population is estimated at 2.64 million of whom 41% are Kuwaiti citizens. Of these, 22.8% are under the age of 15 years, while the corresponding figure among non-Kuwaitis is 16%. The population of people above 65 years of age is estimated at 1.6%. Life expectancy at birth is 78.7 years. About 92% of the adult population and about 90% of the female adult population are literate. The crude birth rate is estimated at 17 per 1000 population, crude death rate 1.8 per 1000 population (2004), infant mortality rate 9.4 per 1000 live births, maternal mortality ratio 0.9 per 10 000 live births, and under-5 mortality rate 11.4 per 1000 (2003). The leading causes of mortality in the total population, in 1997, were: diseases of the circulatory system (38.4%), accidents (16.1%), neoplasms (10.7%) and diseases of the respiratory system (5%). The per capita gross national product in 2002 was US\$ 14400. Of the total budget, 6.9% goes to the Ministry of Public Health. Annual per capita expenditure by the Ministry of Public Health is US\$ 547 (2002). The rates per 10 000 population for physicians, dentists, nurses/midwives and hospital beds are 19, 3, 40 and 21, respectively. Non-Kuwaiti nurses represent 86% of all nurses (2003).

Articles 9, 10, 11, and 15 of the Constitution clearly affirm the responsibility of the state for provision of health care to all sectors of the population, with special emphasis on vulnerable groups such as the handicapped, the deprived, children, mothers and the elderly. The health plan, as part of the total socioeconomic development plan and health policy,

is based on three principles: maintenance and promotion of health; improvement of the physical, mental and social well-being of the people; and reducing morbidity, disability and mortality as much as possible. In this framework, health goals have been defined as long-term and medium- or short-term.

The health system is based on three levels of health care delivery: primary, secondary and tertiary health care. Primary health care is delivered through a series of health centres. Family health clinics, mother and childcare clinics, diabetic clinics, dental clinics, and preventive care clinics; school health services, ambulance services and police health services are also available.

Secondary health care is provided through six general hospitals, each serving about 300 000 people. Tertiary health care is provided through a number of national specialized hospitals and clinics.

The regional organization of the health care delivery system is now complete so that each of the six general hospitals, along with a number of health centres which refer to it, constitutes a health region. Regional directors of health are involved in the planning process as well as in itemization of the budget and recruiting of human resources. They are responsible for annually reporting on the activities of their regions.

Mental health

Historical aspects

Mental health care in Kuwait can be considered to fall into three distinct phases. Until the late 1980s mental health care was strongly institutionalized in the form of a large psychiatric hospital in Kuwait city. This situation existed until alternatives were considered as part of developing a national programme of mental health. Iraqi occupation defined the next phase as it brought to the forefront a new set of needs due to the period of occupation. The third phase relates to the period of reorganization of mental health care in the country.

Mental health infrastructure

The major centre of psychiatric care is the Psychiatric Hospital in Kuwait city, with 480 beds. The hospital facility has 24 wards, 3 of which

are for treatment of addiction, separate from the main hospital building, with 58 beds, of which 14 are for detoxification, 24 for rehabilitation and 20 for long stay. This unit admits male patients only.

The rest of the wards cater for acute, short-term, long-term, geriatric and forensic patients in addition to an occupational therapy centre and a day centre. There is a new hospital under construction with additional 260 beds along with a day centre for 150 clients. There are also plans to open a pilot halfway house to cater for 30 patients, in one of the regions. Outpatient clinics are conducted both at the Psychiatric Hospital as well as at the five regional hospitals (Adan, Amiri, Farwaniyya, Jahra and Mubarak Al Kabir). Psychiatric clinics are also conducted at various other centres such as prisons, special schools and centres where psychiatric assistance is required (14 centres).

Child psychiatric clinics are carried out in the paediatric departments in Sabah, Amiri and Mubarak hospitals and the Rigae centre.

At present, there are no community mental health facilities such as halfway houses, group homes, day centres or sheltered workshops.

For occupational activities in the psychiatric hospital there is a workshop which offers art, woodwork, sewing, embroidery and domestic science. A social, leisure and recreational programme also exists, with outings and visits to various facilities in the country. The available facilities however are not adequate.

A very important outpatient psychiatric service is the Rigae centre, which opened in 1993. This is for care of those suffering from post-traumatic stress disorder and provides services for those affected by occupation during the events prior to the Gulf War, such as prisoners of war, the injured and families of those killed, injured or missing. This centre also carries out public education and research activities.

Mental health human resources

There are 51 psychiatrists, 17 psychologists, 8 social workers, 294 psychiatric nurses and 182 non-medical staff working in the Psychiatric Hospital. About 45% of the psychiatrists and 80% of the rest of the staff are expatriates.

Undergraduate medical education in psychiatry consists of 130 hours, of which 100 hours are for practical training.

The official mental health policy and the national programme for mental health formulated in 1997 advocates the regionalization of services and the integration of mental health into primary health care. Training of primary health care workers in mental health issues is a recognized priority. At present, training includes a 5-week clinical attachment for medical students and appropriate courses for nurses. To improve detection, referral practice and treatment of common neuropsychiatric disorders primary care physicians are attached to specialist mental health services for a four-week period. Each course is attended by between two and four physicians depending on interest, background and availability. Family doctors are attached for 8 weeks of postgraduate training. Over 40 personnel have been trained. The policies for essential drugs and narcotics and substance abuse were formulated in 1983 and 1980, respectively.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is substantial epidemiological data on mental illnesses in Kuwait in internationally accessible literature. No attempt was made to include this information here.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1957. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1983.

National mental health programme

A national mental health programme is present. The programme was formulated in 1997.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1980.

Mental health legislation

There is no written legislation. However, efforts had been made to formalize a legislation, though it has not been successful. Details about the year of enactment of the mental health legislation are not available.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are social insurance, private insurance and out-of-pocket expenditure by the patient or family. The country has disability benefits for persons with mental disorders. Treatment is provided by the Government and social benefits by the Ministry of Social Affairs.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. Primary care is provided by the family doctor. Facilities should be developed further.

Regular training of primary care professionals is carried out in the field of mental health. In 2003–2004, about 40 personnel were trained. Primary care physicians and family physicians are attached to specialist mental health services for a 4 and 8 weeks period, respectively.

There are community care facilities for patients with mental disorders. Community care is provided through district and general hospitals and family doctors. Community care facilities are not well developed. However, there are 2 day care centres which cater to more than 30 clients and one half-way house that caters to 30 clients.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	3.4
Psychiatric beds in mental hospitals per 10 000 population	3.4
Psychiatric beds in general hospitals per 10 000 population	0
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	3.1

Number of neurosurgeons per 100 000 population	
Number of psychiatric nurses per 100 000 population	22.5
Number of neurologists per 100 000 population	
Number of psychologists per 100 000 population	1.4
Number of social workers per 100 000 population	0.4

There are 19 occupational therapists. There is a plan to increase the bed strength in mental hospitals from the current level of 3.4 per 10 000 to 4.58 per 10 000 population in 2005. Some beds have been earmarked for the management of drug abusers (260), geriatric and forensic patients. There is a specialized unit for treating PTSD patients. Although there are more than 1000 psychologists and social workers, only a few work in the field of mental health; 31 of them are employed by the psychiatric hospital which serves as the main psychiatric set-up for Kuwait.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention, treatment and rehabilitation.

Information gathering system

There is a mental health reporting system in the country. Only data from the psychiatric hospital are available. The country has a data collection system on mental health.

Programmes for special populations

The country has specific programmes for mental health for disaster affected population, elderly and children.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, ethosuximide, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, biperiden, carbidopa, levodopa.

Additional sources of information

Bale R. A project to develop quality improvements in the Kuwait mental health service. *Journal of psychiatric practice*, 2000, 24:112–12.

Lebanon

Overview

Lebanon has a surface area of 10 454 km², with a Mediterranean coastline of 211 km. Beirut, the capital, stands in the centre of this coastal strip. The Lebanese terrain is a mixture of coast, mountain and inland plain. The total population is estimated to be 4.37 million, 85% of whom are living in urban areas (2004). The percentage of the population below 15 years and above 65 years of age is 28.4% and 6.6%, respectively (2000). Of females, 84% above the age of 15 years are literate and the total adult literacy rate is 88% (2000). The crude death rate is estimated at 4.1 per 1000 population and the crude birth rate 16.9 per 1000 population (2004), infant mortality rate 26 per 1000 live births (2001), maternal mortality ratio 10.4 per 10 000 live births, total life expectancy at birth 71.3 years, and under-5 mortality rate 33 per 1000 live births (2001). The per capita gross national product in 2004 was US\$ 4951. The Ministry of Public Health budget is 3.7% of the national budget. The rates for physicians, dentists, nurses/midwives and hospital beds per 10 000 of the population are 23.6, 8.81, 30 and 30, respectively (2004)

The fifteen years of civil war which ended in the early 1990s caused massive destruction to the country's infrastructure, electricity, water and telecommunication systems, and the road network was severely damaged. As a result, the quality of life of the people had deteriorated, in the areas affected in particular and in the whole of Lebanon in general.

Development of health systems

The national health policy is based on health being a constitutional right of every citizen and an integral component of human rights. The health policy emphasizes the primary health care approach and the concept of “centralized control and decentralized implementation”.

The district health system, which has been implemented in seven districts, is made up of three components: the community health workers, the health centres and the district hospital. The community health worker is chosen by the village committee and performs home visits and a variety of duties encompassing aspects of primary health care; he or she also refers patients to the health centre when necessary. The health centre has at least one physician and one nurse and provides service for maternal and child health, family planning, health education, school health, laboratory and radiological investigations, provision of necessary drugs, promotion of good nutrition, vaccination, and provision of supervision for community health workers, as well as collection of data and compilation of statistics. Each health centre is linked to a district hospital in a referral chain.

The district hospital, which is staffed with a surgeon, an internal medicine specialist, a paediatrician and a gynaecologist, is the final point in the referral chain of the district health system. The district hospital can refer the more complicated cases to a regional or central hospital. A district health committee supervises the district. These committees consist of representatives of all health outlets and facilities in the district as well as local representatives from the Ministry of Education and the municipalities. The governor of the district chairs the committee.

As the public sector became progressively marginalized as a result of the war, numerous nongovernmental, private, voluntary and religious organizations emerged to fill the gap. The Red Crescent and the Red Cross play a major part in health care delivery. They are charged with certain services such as immunization and blood bank services. However, many of the services provided by private and nongovernmental organizations are not affordable and the Ministry of Public Health and Social Affairs subsidize private hospitals for treatment of patients who cannot afford to pay.

Mental health

The health system in general and mental health in particular are very much dependent on nongovernmental and religious organizations. Such organizations get support from different Christian, Druze and Muslim communities, but usually serve the whole population.

On the outskirts of Beirut, the Lebanese Hospital for Mental and Nervous Disorders was established in 1898, run first by English psychiatrists and later on by Lebanese specialists. There is only one functioning psychiatric hospital, the 1500-bed Psychiatric Hospital of the Cross (Hôpital Psychiatrique de la Croix) founded in the early 1950s and run by Maronite nuns. Psychoses account for 60% of the admissions. Male schizophrenic patients outnumber females in a proportion of 2 to 1. The Ministry of Public Health subsidizes the care of the majority of hospitalized patients.

As mentioned, there are other facilities supported by other communities. An example is the Muslim Old People's Asylum, which is located in western Beirut.

It is estimated that there are 45 psychiatrists in Lebanon. Some of them are attached to the mental hospital, where they work part-time. The others are working in private clinics. The current emphasis on training includes sensitizing medical students to mental health problems by a two-month training course in the fourth year. Postgraduate training includes four years of intensive theoretical and clinical training at the Psychiatric Hospital of the Cross. In 1987, the Psychiatric Hospital of the Cross signed an agreement with a French university to enable Lebanese physicians to be trained in psychiatry in Beirut and take the final examination for the Special Studies Certificate in Paris. General practitioners and general nurses receive two to three months' training. Community involvement includes the activities of the church in response to the major national problem of drug dependency. There were an estimated 24 000 young substance dependants in the country during the years of conflict; however, this figure dropped significantly after the war to an estimated 8000–10 000 with heroin the main substance of dependence, inhaled or injected. There are 60 clinical psychologists and they work mainly in schools, 20 psychiatric social workers and 30 psychiatric nurses.

The national mental health programme and essential drugs policy were prepared in December 1987. The objectives of the mental health programme are to make mental health care available for everybody in Lebanon, in a decentralized manner); to adapt models of care to the social and cultural patterns of the rural communities which, up to now, have received little attention; to enhance mental health knowledge of the community in order to counter the stigma attached to neuropsychiatric disorders; to develop suitable programmes to assist the large number of persons affected by the war; and to ensure provision of essential neuropsychiatric drugs.

The progress of the national mental health programme has not been satisfactory due to the war and its disruption.

Currently, the Ministry of Public Health of Lebanon, in an effort to improve mental health services is focusing on two priority areas.

The first area is provision of ambulatory mental health services within primary health care centres. This is conceived with the aim of promoting prevention of neuropsychiatric disorders, providing care for those suffering from such disorders in their own milieu and decreasing stigma. Furthermore, the availability of these centres all over the country facilitates implementation and reduces costs. Each mental health team will comprise a psychiatrist, a social worker, a psychologist and a psychiatric nurse who will work in close collaboration with the other physicians of the centre and paramedical staff. A prevalence and service fact-finding survey for psychiatric morbidity is now being conducted to try and quantify the problems that the war has created in the psychosocial domains. At primary health care centres, a complete human resources reorganization is under way with the introduction of quality assurance, on-site training of paramedical staff and the formation of psychiatric teams.

The second area is the setting up of a psychogeriatric care system within a comprehensive geriatric service. The need for such a system is becoming obvious in Lebanon as the population is ageing. Although there are several old people's homes, none has a psychogeriatric care system with standardized procedures. In a second phase, a community-based care system will be developed for the care of the elderly.

Already two centres for outpatient primary health care and three centres for geriatric custodial care have been identified for this work, the medical, paramedical and nursing teams have been formed, and on-site training of existing staff is being conducted. In addition, the senior physician visited the United Kingdom on a WHO fellowship in geriatric medicine during 1996. In the area of quality assurance, an extensive database has been developed with a computer link-up.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Weissman et al (1996, 1997) conducted a study in 10 countries including Lebanon to estimate the rates and patterns of major depression, bipolar disorder and panic disorder based on cross-national epidemiologic surveys ($n = 40\,000$). The lifetime rates for major depression ranged from 1.5% in Taiwan to 19% in Beirut. The annual rates ranged from 0.8% in Taiwan to 5.8% in New Zealand. The mean age at onset showed less variation, and the rates of major depression were higher for women than men at all sites. Major depression was also associated with increased risk for comorbidity with substance abuse and anxiety disorders at all sites. The lifetime rates of bipolar disorder were more consistent across countries (0.3% in Taiwan to 1.5% in New Zealand). The sex ratios were nearly equal and the age at first onset was on an average 6 years earlier than the onset of major depression. The lifetime prevalence rates for panic disorder ranged from 0.4% in Taiwan to 2.9% in Italy. The mean age at first onset was usually in early to middle adulthood, and females were affected more than males. Panic disorder was associated with an increased risk of agoraphobia and major depression in all countries. Karam et al (2000) conducted a study on a stratified cluster sample of 1851 students from two major universities using the Diagnostic Interview Schedule (DIS) and DSM-III criteria. They found that the prevalence of alcohol, nicotine, tranquillizer and heroin use was 49.4%, 18.3%, 10.2% and 0.4%, respectively. Alcohol abuse was present in 2.1% and alcohol dependence in 2.4%. Abuse and dependence of other substances besides nicotine and alcohol ranged between 0.1 to 0.8%. Naja et al (2000) found that in a randomly selected community sample of 1000 people, the prevalence of benzodiazepine use during the past month

was 9.6%, with half being dependent on the drug. Current use was associated with age greater than 45 years, female gender, cigarette smoking and recent life events. Karam et al (1998) interviewed randomly selected 658 subjects, aged 18–65 years, from four Lebanese communities with the Arabic version of the DIS (DSM-III-R criteria) and the War Events Questionnaire. The lifetime prevalence of major depression across the four communities varied from 16.3% to 41.9%. Level of exposure to war and a history of pre-war depression predicted the development of depression during war. Chaaya et al (2002) interviewed about 400 postpartum women at two points in time, 24 hours and 3–5 months after delivery. During the latter visit, subjects were screened using the Edinburgh Postnatal Depression Scale. The overall prevalence of postpartum depression was 21%, but it was significantly lower in urban (16%) compared to the rural (26%) area. Lack of social support and prenatal and lifetime depression, stressful life events, vaginal delivery, poor education, unemployment and chronic health problems were significantly related to postpartum depression. El Khoury et al (1999) used the DIS to interview a group of women ($n = 150$) at two points in time of pregnancy, the first on the second post-delivery day and the second, one year later. The prevalence of major depression was 31.3% during lifetime, 10% during pregnancy and 10.9% during one year follow-up. Lifetime depression was associated with the number of children in the household. Depression during pregnancy was inversely related to economic and educational level. Weissman et al (1999) assessed over 40 000 subjects in nine countries including Lebanon, using the DIS. The lifetime prevalence of suicide ideation ranged from 2.1% (Lebanon) to 18.5% (New Zealand) and for suicide attempts from 0.7% (Lebanon) to 5.9% (Puerto Rico). Women had a 2–3 fold higher rate of suicide attempts than men in most countries. Suicide ideation and attempts were associated with being divorced/separated. Chiementi et al (1989) used a questionnaire to interview mothers of more than 1000 children aged 3 to 9 years. Children who had experienced death of a family member, forced displacement of family or destruction of home or had witnessed death were 1.7 times more likely to exhibit nervous, regressive, aggressive and depressive behaviour than those who had not experienced trauma. Macksoud and Aber (1996) interviewed 224 Lebanese children (10–16 years old) and found that PTSD varied according to the

number and level of stressful exposure. Various types of war traumas were differentially related to PTSD, mental health symptoms and adaptational outcomes.

Mental health resources

Mental health policy

A mental health policy is absent.

Substance abuse policy

A substance abuse policy is absent.

National mental health programme

A national mental health programme is present. The programme was formulated in 1987. Although a national mental health programme was initiated in 1987, its progress was not satisfactory due to the war.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1987.

Mental health legislation

Details about mental health legislation are not available.

Mental health financing

There are no budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are tax-based, out-of-pocket expenditure by the patient or family and social insurance. Lebanon depends mainly on the private sector for the provision of health services. The Ministry of Health has contracts with the private sector and needy patients receive free treatment. The country does not have disability benefits for persons with mental disorders. There is no disability funding for mental health.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is not available at the primary level. In order to improve mental health services the Government is shifting from comprehensive care to areas of importance. The two areas of importance

have been ambulatory mental health service within the primary care centres and a psychogeriatric care system within a comprehensive geriatric service with emphasis on a community-oriented programme.

Regular training of primary care professionals is not carried out in the field of mental health. A training programme was supposed to have started in 2001. General practitioners and general nurses receive 2-3 months training. Training is also under way on psychogeriatric issues.

There are no community care facilities for patients with mental disorders.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	7.5
Psychiatric beds in mental hospitals per 10 000 population	7.4
Psychiatric beds in general hospitals per 10 000 population	0.1
Psychiatric beds in other settings per 10 000 population	
Number of psychiatrists per 100 000 population	2
Number of neurosurgeons per 100 000 population	1
Number of psychiatric nurses per 100 000 population	5.3
Number of neurologists per 100 000 population	3
Number of psychologists per 100 000 population	0.6
Number of social workers per 100 000 population	1.5

The figures for personnel are approximations. The number of psychologists working in mental health is around 10% of the total number of psychologists. There is only one psychiatric hospital run by the nuns. This centre also runs schools, medical clinics and hospice centres. All psychiatrists have private clinics.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in prevention, treatment and rehabilitation.

Information gathering system

There is a mental health reporting system in the country. The country has no data collection system or epidemiological study on mental health.

Programmes for special populations

The country has specific programmes for mental health for children. A comprehensive system of care has been developed for management of some child psychiatric disorders like attention-deficit/hyperactivity disorder.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, biperiden, carbidopa, levodopa. All drugs (including second and third generation anti-psychotics, anti-depressants, anti-convulsants and non-conventional medication) can be prescribed by primary care physicians and are available free of cost for poor patients through the Ministry of Health.

Additional sources of information

Aboujaoude E. The psychiatric hospital of the cross: a sane asylum in the Middle East. *American journal of psychiatry*, 1982, 159:1982.

Chaaya M, Campbell OM, El Kak F et al. Postpartum depression: prevalence and determinants in Lebanon. *Archives of women's mental health*, 2002, 5:65–72.

Chimienti G, Nasr JA, Khalifeh I. Children's reactions to war-related stress. Affective symptoms and behaviour problems. *Social psychiatry and psychiatric epidemiology*, 1989, 24:282–287.

El Khoury N, Karam EG, Melhem NM. Depression and pregnancy. *Journal médical Libanais*, 1999, 47:169–174.

Fayyad JA, Jahshan CS, Karam EG. Systems development of child mental health services in developing countries. *Child and adolescent psychiatric clinics of North America*, 2001, 10:745–762.

Karam EG, Howard DB, Karam AN et al. Major depression and external stressors: The Lebanon wars. *European archives of psychiatry and clinical neuroscience*, 1998, 248:225–230.

Karam E, Melhema N, Mansour C et al. Use and abuse of licit and illicit substances: prevalence and risk factors among students in Lebanon. *European addiction research*, 2000, 6:189–197.

Macksoud MS, Aber JL. The war experiences and psychosocial development of children in Lebanon. *Child development*, 1996, 67:70–88.

Mohit A. Mental health and psychiatry in the Middle East: historical development. *Eastern Mediterranean health journal*, 2001, 7:336–347.

Naja WJ, Pelissolo A, Haddad RS et al. A general population survey on patterns of benzodiazepine use and dependence in Lebanon. *Acta psychiatrica Scandinavica*, 2000, 102:429–431.

Weissman MM, Bland RC, Canino GJ et al. Cross-national epidemiology of major depression and bipolar disorder. *Journal of the American medical association*, 1996, 276:293–299.

Weissman MM, Bland RC, Canino GJ et al. The cross-national epidemiology of panic disorder. *Archives of general psychiatry*, 1997, 54: 305–309.

Weissman MM, Bland, RC, Canino GJ et al. Prevalence of suicide ideation and suicide attempts in nine countries. *Psychological medicine*, 1999, 29: 9–17.

Libyan Arab Jamahiriya

Overview

The Libyan Arab Jamahiriya has an estimated area of 1 775 500 km² with a population of 5.84 million (2004). Most of the population is concentrated in the main cities on the coastal plains, namely Tripoli, Benghazi, Misurata and Zuwarah. About 85% of the population is urban. The population growth rate is 2.9% (2002), the percentage of the population below 15 years of age and above 65 years of age is 32.6% and 4%, respectively (2002). It is estimated that 82% of the total adult population and 74% of the female adult population are literate (1996). The crude death rate is estimated at 7 per 1000 population in 2002, and the crude birth rate is estimated at 36 per 1000 population. Life expectancy is 69.5 years (2001). In 2001, infant mortality was estimated at 24.4 per 1000 live births, maternal mortality 4.0 per 10 000 live births, and under-5 mortality 30.1 per 1000 live births.

The main causes of hospital mortality in 1987 were as follows: injury and poisoning (15.5%); diseases of the circulatory system (11.6%); perinatal mortality (11.4%); diseases of the respiratory system (7%); and neoplasm (4.4%). The per capita gross national product was US\$ 3690. The Ministry of Health's budget is 3.3% of the national budget, comprising 12% of the gross national product, and its per capita expenditure is US\$ 121. The rates per 10 000 population for physicians, dentists and nurses are 12.1, 0.9 and 50, respectively and there are 39 beds per 10 000 population (2002). The geographic distribution of beds is more or less equitable, with the highest rate per 10 000 population being less than twice the lowest rate.

The motto of Libyan health policy is “health for all by all”. The goal of this policy is to create a society in which every member can play an active role, both socially and economically, and in which services are equally distributed among the whole population. The strategy involves:

- enhancing medical and paramedical human resources through redistribution and training of necessary cadres
- improving, updating and developing health facilities
- improving the management of hospitals
- focusing on public health programmes: the four main pillars which support primary health care are health education; maternal, child and school health services; nutrition and environmental protection programmes; and programmes on control and prevention of communicable diseases.
- supporting the health infrastructure to meet the needs of the increasing population.

The health system operates on several levels. The first level consists of the basic health care units, each providing curative and preventive services for 5000 to 10 000 citizens. The second level comprises the basic health care centres, which serve from 10 000 to 26 000 citizens. The third level consists of the polyclinics, which play an important role in cities. Staffed by specialized physicians and containing laboratory as well as radiological services and a pharmacy, these polyclinics serve approximately 50 000 to 60 000 citizens, and there are 18 of them throughout the country. At the fourth level, are the hospitals in rural areas and the central hospitals in urban areas. The fifth level comprises the specialized hospitals.

Mental health

Historical developments

Mental health care in the Libyan Arab Jamahiriya is rooted in a centralized and institution-based system. The first psychiatric facility in the country was a traditional hospital at Al Marj Al Qadim. It was active during the Italian occupation before the Second World War and was destroyed by an earthquake in the 1960s, leaving only the Serganish Mental Hospital, in Tripoli, with a capacity of 1200 beds. This hospital accepts patients from all

over the country. Because of lack of staff it caters to only 350 inpatients. In 1974, a psychiatric hospital of 200 beds was established at Dar Al Shifa. A new hospital of 250 beds was built in the early 1980s. This includes a mosque and a farm for the rehabilitation of patients.

Benghazi Psychiatric Hospital, has 350 beds. There is a rehabilitation department and provision for recreational and occupational therapy.

There are outpatient psychiatric units in general hospitals across the country such as Al Marj (20 beds), Al Bayda (20 beds), Denna (40 beds), Al Korfa (geriatric outpatient department) and Homs (10 beds). These are psychiatric clinics connected to general health facilities.

Care for the mentally retarded is provided in three institutions. In Tripoli, there is Al Swani Sanatorium with 450 beds; at Benghazi, there are 235 beds; and at Al Jabal Al Akhdar, there are 76 beds.

Al Amal Sanatorium in Tripoli has 130 beds for geriatric services.

There is a department of child psychiatry in the Paediatric Hospital at Benghazi.

Drug abuse is becoming a major health, social and economic problem. Many drug abusers are injecting heroin. In the mental health facility of Tripoli, there is a 50-bed detoxification unit. It is voluntary. No substitution medication is given. Patients are accepted only once and in case of relapse, they are not readmitted.

Mental health human resources

There are eight qualified psychiatrists: four in Tripoli and four in Benghazi. There are also residents from other countries working in the two hospitals. There are nine social workers and eight psychologists in Tripoli and similar numbers in Benghazi.

Students undergoing undergraduate training in psychology at Garyounis University receive training in clinical psychology. Social workers graduate from the High Institute for Social Study. There is a school for psychiatric nurses at Tripoli Mental Hospital. It gives a degree equivalent to a high school diploma. There is an acute shortage of occupational therapists.

The undergraduate medical students receive psychiatric theory teaching (30 hours) in the fourth year of study. They are also given practical training at Benghazi and Tripoli Mental Hospitals.

National programme of mental health

Official recognition for mental health was demonstrated in the form of ministerial resolution 654 in 1975, which regulated the treatment of the mentally ill in mental hospitals. A national mental health programme was put forward in November 1988. Ministerial Resolution 172 of 1989 formulated a board to look after the national mental health care programme.

The objectives of the national mental health programme are to provide essential mental health care for all in the Libyan Arab Jamahiriya and to foster application of mental health principles in other spheres of life such as work, family, community participation and national growth. The national mental health programme identified the strategies and the administrative mechanisms. The goals for 1990–95 were: starting of postgraduate training in psychiatry and clinical psychology; short courses for training of social workers; training of primary care physicians; establishment of day hospitals and occupational therapy units; a general hospital psychiatry unit with 25 beds; and research.

The current mental health legislation was introduced in 1975.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is a paucity of epidemiological data on mental illnesses in Libyan Arab Jamahiriya in internationally accessible literature. Avasthi et al (1991) conducted a study on 1009 psychiatric in-patients. Using ICD-9 descriptions, they found schizophrenic psychosis in 39%, affective psychosis in 17%, neurotic disorders in 12%, organic psychosis in 8% and acute psychosis in 7%. Neurotic depression was the commonest type of neurotic disorder, and anti-social personality was the commonest among personality disorders. Pu et al (1986) did a sociodemographic study on 100 patients suffering from hysteria in one particular area. Verma (1990) conducted a cytogenetic analysis of cases of Down syndrome and found the prevalence to be 1 in 516 live births. 82% of the mothers of cases of Down syndrome were over 30 years of age as compared to 36% of the mothers of controls. Cytogenetically 96% of the cases were that of trisomy 21.

Mental health resources

Mental health policy

A mental health policy is absent. Mental health policy is part of the general health policy.

Substance abuse policy

A substance abuse policy is absent.

National mental health programme

A national mental health programme is present. The programme was formulated in 1988. The national mental health programme was put forward with the objective of providing essential mental health care for all in all spheres of life, like work, family, community and national growth.

National therapeutic drug policy/essential list of drugs

Details about the national therapeutic drug policy/essential list of drugs are not available.

Mental health legislation

A ministerial resolution No. 654 in 1975 regulates the treatment of mentally ill in mental hospitals. It needs to be revised. There is a national committee looking into the aspect of a new legislation. The latest legislation was enacted in 1975.

Mental health financing

There are no budget allocations for mental health. Details about expenditure on mental health are not available. Details about sources of financing are not available. The country has disability benefits for persons with mental disorders. A monthly stipend of 90 Libyan dinars is provided to the mentally disabled.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level.

Regular training of primary care professionals is carried out in the field of mental health. Psychiatric services are integrated in the primary care system. Training programmes for social workers, primary care physicians and clinical psychologists are components of the mental health programme.

However, the facilities are poor and manuals for doctors and workers are not available.

There are community care facilities for patients with mental disorders.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1
Psychiatric beds in mental hospitals per 10 000 population	1
Psychiatric beds in general hospitals per 10 000 population	0
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	0.18
Number of neurosurgeons per 100 000 population	0.18
Number of psychiatric nurses per 100 000 population	0.5
Number of neurologists per 100 000 population	0.15
Number of psychologists per 100 000 population	5
Number of social workers per 100 000 population	1.5

Most psychologists are social psychologists. There are beds for the mentally retarded (500), elderly (130), drug abusers (50) and children. Patients with drug abuse are admitted only once. There is an acute shortage of occupational therapists.

Nongovernmental organizations

Details about nongovernmental organization facilities in mental health are not available.

Information gathering system

Details about mental health reporting systems are not available. Details about the data collection system or epidemiological studies on mental health are not available. Hospital data collection is done.

Programmes for special populations

The country has specific programmes for mental health for elderly and children. There are services for children and elderly and also forensic psychiatry services.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: unknown.

Additional sources of information

Avasthi A et al. Inpatient sociodemographic and diagnostic study from a psychiatric hospital in Libya. *International journal of social psychiatry*, 1991, 37:267–279.

Pu T et al. One hundred cases of hysteria in eastern Libya. A socio-demographic study. *British journal of psychiatry*, 1986, 148:606–609.

Verma IC et al. Cytogenetic analysis of Down syndrome in Libya. *Indian journal of pediatrics*, 1990, 57:245–248.

Morocco

Overview

Morocco covers an area of 710 850 km² and is located in north-west Africa, between the Mediterranean Sea, the Atlantic Ocean and the Sahara Desert.

Morocco is a constitutional monarchy. The official religion is Islam. Administratively, the country is divided into regions which are subdivided into states, provinces and prefectures. In total, there are 16 large regions and 68 provinces. The regions currently have autonomous management (local governments).

The population of Morocco is about 30.9 million, and the average population density is 38.4 per km². Of these, 29.6% are under 15 years old and 5.2% are above 65 years of age (2004). The urban population amounted to 55% of the total population in 2004. The total adult literacy rate and the female adult literacy rate are 52% and 38%, respectively (2002). The infant mortality rate is estimated at 40 per 1000 live births, maternal mortality ratio 22.7 per 10 000 live births and under-5 mortality rate 47 per 1000 live births. The total life expectancy at birth is 70.3 years (2002), the crude birth rate is estimated to be 20.1 and crude death rate 5.5 per 1000 population (2004).

The per capita gross national product is US\$ 1200. The Ministry of Public Health budget is 5.3% of the government budget. At present there are 72 general hospitals and 34 specialized hospitals, with a total bed strength of 25 715, coming to 11 beds per 10 000 population. The corresponding rates for physicians, dentists and nurses/midwives are 5.4, 1 and 8.7 respectively (2003). There are 1949 primary health care institutions (563 in rural

areas and 1386 in urban areas), corresponding to 0.8 establishment per 10 000 inhabitants (1999).

Health system infrastructure

The national health system is organized in three main sectors, public, private for-profit and private non-profit.

The public sector comprises the Royal Armed Forces Health Service and the Ministry of Public Health. It aims to implement prevention, promotion of health and treatment strategies through two networks.

The primary health care network consists of:

- the rural dispensary
- the community health centre
- the local hospital
- the urban health centre.

The hospital network comprises general hospitals and specialized hospitals and is organized on three intervention levels:

- public health polyclinics and provincial hospitals
- regional hospitals
- academic hospitals.

The private non-profit sector includes national funds of social security institutions and mutual fund institutions.

Mental health

Introduction of modern psychiatry

In Morocco many psychiatric institutions were built between 1920 and 1995. Berrechid Hospital (near Casablanca) was the first to be operational. It has an asylum structure with a large capacity (2000 beds). Next was Til Mellil Psychiatric Hospital (in the Casablanca region). Regional psychiatric hospitals, with smaller capacities (80 to 100 beds), were founded in Marrakech, Oujda, Fès, Tangiers, Tétouan and Meknès. Since the 1960s, psychiatric services began to be integrated into general hospitals (10 to 30 beds) and development of ambulatory psychiatry services in the public and private sectors started. The national mental health programme was adopted

in 1992 while the policies for narcotics/substance abuse and essential drugs were formulated in 1972.

Legislative measures

The principal law is the 1959 *dahir* (Royal decree). It specifies manner of patient placement and discharge and sets forth protective measures for mentally sick people and for their property.

Administration and planning

The Central Service for Mental Health and Degenerative Diseases was created in 1959. The service develops plans and programmes for the prevention and treatment of mental illnesses as well as the protection of the mentally ill, supervises medical care institutions (public and private), health centres and psychiatric institutions, coordinates different sectors involved in mental health care and with national and international nongovernmental organizations, oversees continuing education of health professionals, furthers the goal of mental health, participates in the fight against drug addiction in coordination with other sectors.

The Mental Health Committee, which organizes and supervises mental institutions and rehabilitation centres, is operated by all sectors on a national level.

Mental health care facilities

Psychiatric institutions are in four main sectors—public health, academic, military and private. There are also institutes for helping mentally handicapped children.

Academic centres

Collège Polytechnique Universitaire de Salé, Al Razi: 200 beds

Collège Polytechnique Universitaire de Casablanca: 120 beds

Public health

Marrakech: 220 beds

Berrechid: 650 beds

Til Mellil: 160 beds

Tangiers: 100 beds

Tétouan: 200 beds

Fès: 130 beds

Oujda: 130 beds.

Psychiatric services integrated into general hospitals

This started at a faster pace after the development of the national programme for mental health. Currently most of the provincial hospitals offer psychiatric services and the break-up of their bed strength is as follows:

Agadir: 60 beds

Laâyoune: 15 beds

Taroudannt: 40 beds

Beni Mellal: 30 beds

Khouribga: 30 beds

Khenifra: 10 beds

Meknès: 80 beds

Mohammedia: 30 beds

Safi: 26 beds

Taza: 4 beds

El Jadida: 20 beds

Al Hoceima: 60 beds.

Military hospitals

Muhammad V Military Hospital of Rabat: 40 beds

Muhammad V Military Hospital of Meknès: 20 beds

Muhammad V Military Hospital of Oujda: 10 beds

Private sector

Sixty-three private surgeries, which are concentrated in urban areas of Morocco.

Ambulatory care facilities

The development of ambulatory psychiatry within the primary health care system has allowed people who previously avoided mental hospitals to have easier access to medical care. This policy has allowed psychiatry to be demystified on the one hand and on the other reduced the average length of time spent in the hospital. There are 200 health centres spread over the country offer mental health services integrated within primary health care.

Summary update (*Mental health atlas*, 2005)

Epidemiology

A WHO assisted study on prevalence of mental disorders was conducted on representative samples ($n = 6000$) from many regions of the country using the Mini International Neuropsychiatry Interview (MINI), and the results are being compiled. Data are regularly collected from public psychiatric institutions. In 2002, among outpatients ($n = 1\,504\,508$), 34% had schizophrenia, 25.1% had mood disorders, 16.7% had neuroses and 1.8% had alcohol and drug use disorders. Among inpatients ($n = 15\,398$) 65.2% had schizophrenia, 11.9% had mood disorders, 2.5% had neuroses and 5.1% had alcohol and drug use disorders (Ministry of Health, 2004). Kadri et al (2002) used DSM-IV criteria to assess sexual dysfunction in a representative sample of the population of women aged 20 and older in one city ($n = 728$). The 6-month prevalence was 26.6% with dysfunctions of sexual arousal as the commonest disorder. Age, financial dependency, number of children and sexual harassment were positively associated with presence of sexual disorder. Ghazal et al (2001) evaluated a randomly selected and representative sample of students attending six secondary schools ($n = 1887$) and a second group composed of students of the French secondary school ($n = 157$). Subjects completed a sociodemographic questionnaire and the Bulimic Investigatory Test of Edinburgh (BITE). In the first group, 15.3% of subjects took at least one substance, 12.7% were dependent on tobacco and 5.7% consumed alcohol occasionally. Almost a sixth of students reported a familial history of disturbed eating behaviour. The overall prevalence of bulimia in this group was 0.8% (1.2% in female and 0.1% in male subjects). The mean age of bulimic subjects was 18.6 years. In the group from the French school, the prevalence of bulimia was 1.9% in the whole sample (3.4% among girls and no case among boys). Bulimic subjects did not differ from the non bulimic subjects with regard to sociodemographic characteristics. Kadri et al (2000) assessed 100 adult males for two consecutive years over a 6-week period during Ramadan with clinical interviews, visual analog scales and the Hamilton Anxiety Scale. Smokers were significantly more irritable than non-smokers before the beginning of Ramadan. An increase in irritability was noted in both groups during Ramadan, but irritability increased more in smokers than in non-

smokers. Taoudi Benchekroun et al (1999) reported that during Ramadan the sleep chronotype as evaluated by the Horne and Ostberg scale changed significantly with an increase of the evening type and a decrease in the morning type. Daytime sleepiness as evaluated by the Epworth Sleepiness Scale was significantly increased.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1972. The components of the policy are promotion, prevention, treatment and rehabilitation. Decentralization is also a component of the policy. Since 1972, the mental health policy has been reviewed several times with the help of the Moroccan Society of Psychiatry. The legislation on mental health, which was formulated in 1959 by *dahir*, is the highest legislation form in the country.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1972.

National mental health programme

A national mental health programme is present. The programme was formulated in 1973. The mental health programme was revised in 1992 and 1995. The programme was formulated according to the *dahir*. The programme has been reviewed several times.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1972. The last review was in 2000. New as well as old drugs (neuroleptics, anti-depressants, mood-regulators) are on the list.

Mental health legislation

The *dahir* 1-58-295 relating to the prevention of mental illnesses and protection of the patients is the latest mental health legislation. Though it is old, its articles are well formulated and were examined by WHO experts in 1998. Reviews may be done in the future. The main aim is to guarantee the medical characteristics of mental institutions by entrusting them with the

prime mission of treating the sick while protecting their rights and their property during their period of illness. The Law created the Central Service for Mental Health and Degenerative Diseases and the Mental Health Committee, organized mental institutions and other psychiatric set-ups and specified different manners of patient admission and discharge among its many other laws, as well as the modalities of protection of the sick.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are tax-based, social insurance, out-of-pocket expenditure by the patient or family and private insurance. Each state has its own budget line specified for equipment and investment work in hospitals at regional levels.

The country has disability benefits for persons with mental disorders. Those who become handicapped or lose their autonomy benefit from the system in the form of paid sick leave plus disability card if the disability is definite. Common diseases are supported like other illnesses.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is available at the primary level. Outpatient clinics are integrated to some extent into the primary health care system. Two hundred health centres spread over the country offer mental health services within primary health care.

Regular training of primary care professionals is carried out in the field of mental health. Training on primary mental health care is integrated in basic academic courses of general physicians, in faculties of medicine and in the health professional training institutes (Instituts de formation en carrières de santé: IFCS).

There are community care facilities for patients with mental disorders. The community programme includes the family which plays an important role in the therapeutic programme.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.783
Psychiatric beds in mental hospitals per 10 000 population	0.52

Psychiatric beds in general hospitals per 10 000 population	0.17
Psychiatric beds in other settings per 10 000 population	0.1
Number of psychiatrists per 100 000 population	0.4
Number of neurosurgeons per 100 000 population	0.12
Number of psychiatric nurses per 100 000 population	2.2
Number of neurologists per 100 000 population	0.3
Number of psychologists per 100 000 population	0.03
Number of social workers per 100 000 population	0.007

The situation is unsatisfactory, especially in the public sector.

Nongovernmental organizations (NGOs)

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention, treatment and rehabilitation.

Information gathering system

There is a mental health reporting system in the country. The country has a data collection system or epidemiological study on mental health. Several specific studies were conducted by the main psychiatric university centres like Ibn Rushd (Casablanca) and Ar-Razi (Rabat-Salé). An exhaustive list of studies and results is available from the Ministry of Health.

Programmes for special populations

The country has specific programmes for mental health for children.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, levodopa. Other drugs are available in the primary health centres.

Other information

There has been a psychiatric tradition in Morocco since the Middle ages; The *moristanes* (health care places for the mentally ill) were precursors of public sector psychiatric hospitals. Then, two psychiatric university centres were established in Salé in the 1960s and in Casablanca in the 1970s. Recently, two university centres were created in Marrakesh and in Fès.

According to mental health policy of the Ministry of Health, several mental health services are being created each year in the general hospitals. The goal is to have sectorized coverage of mental needs of the population in the entire country.

Additional sources of information

Des organismes chargés de la prevention et du traitement des maladies mentales et de la protection des malades mentaux (Government document).

Ghazal N et al. Prevalence of bulimia nervosa among secondary school students in Casablanca. *Encephale*, 2001, 27:338–342.

Kadri N et al. Irritability during the month of Ramadan. *Psychosomatic medicine*, 2000, 62:280–285.

Kadri N, McHichi Alami KH, McHakra Tahiri S. Sexual dysfunction in women: population based epidemiological study. *Archives of women's mental health*, 2002, 5:59–63.

Moussaoui D. Creating a department of psychiatry in a developing country. *World psychiatry*, 2002, 1:57–58.

Taoudi Benchekroun M et al. Epidemiological study: chronotype and daytime sleepiness before and during Ramadan. *Therapie*, 2002, 54:567–572.

Oman

Overview

Oman, with a surface area of 309 500 km², occupies the south-eastern corner of the Arabian Peninsula. Most of Oman consists of desert, semi-arid plains and mountains. Northern Oman, which contains most of the resources and population, is separated from the southern province of Dhofar by 700 km of desert. The total population is 2.65 million (2004), with about 73% locals. About 71% of the population lives in urban areas. The proportion of the population below 15 years of age and above 60 years of age is 33.7% and 3.2 %, respectively (2002). In 2003, 81% of the total adult population was literate and in the same year, the percentage of adult literate females was estimated at 74%. Estimated total life expectancy at birth is 74.2 years, infant mortality rate 10.3 per 1000 live births, under-5 mortality rate 11.1 per 1000 live birth and maternal mortality ratio 2.3 per 10 000 live births (2003). The per capita gross domestic product is US\$ 7337 (2003), and the Ministry of Health is allocated 5.4% of the budget, which is 2.2% of the gross national product. The Ministry of Health's per capita expenditure is US\$ 201 as compared to the national per capita expenditure of US\$ 246 on health. The rates for physicians, dentists, nurses and hospital beds per 10 000 population are 16.3, 1.8, 37 and 22, respectively (2004). The majority of the population is Muslim.

Health for all has been endorsed as national policy. The principal thrust of the national health policies is that health care is the right of every individual; The Ministry of Health is the main provider of health care in the country. There are three other governmental organizations concerned,

namely the Ministry of Defence, the Royal Oman Police, and Petroleum Development of Oman, which provide medical care only to their employees and dependants. Only two private hospitals exist in Oman. During 1989, the health system was regionalized, and the provision of health services in each of the eight health regions became the responsibility of the regional directorates general.

Health services, at the first-contact level, are provided through health centres, each headed by a resident physician. The services provided by these facilities are basically curative, with a number of preventive and promotive services such as maternal and child health services. The outpatient departments of small local hospitals (with 4–49 beds) are also accessible to the people as a first line of contact and thus contribute, to a large extent, in the delivery of primary health care. Attached to both health centres and hospitals are 66 public health units manned either by one or more physicians or, in the case of the smaller ones, by sanitarians. In rural areas, health services are based on a combination of static as well as mobile health units to serve both the rural and the nomadic populations. At the local and regional levels, the curative services are provided by local hospitals with 50 to 60 beds and regional hospitals with 200 or more beds. These hospitals have extensive inpatient and outpatient services including specialized services in medicine; surgery; paediatrics; gynaecology; ear, nose and throat; ophthalmology; dental surgery; dermatology; and psychiatry. At the central level, three major hospitals in Muscat provide tertiary care and act as national referral hospitals. In addition, there is one psychiatric hospital.

Nongovernmental organizations, such as the Oman Women's Association, cooperate in the Ministry of Health's expanded programme on immunization, maternal and child health services, and health education programmes.

The Faculty of Medicine at Sultan Qaboos University started functioning in 1986. Total enrolment in 1989–90 was 238 medical students (in addition to 99 studying medicine overseas). The Institute of Health Sciences has increased its training facilities for paramedical staff and is now producing nursing personnel, medical laboratory technicians, physiotherapists and radiography technicians. In addition, regional training

centres are being established to train secondary school graduates as health workers.

Mental health

Historical aspects

The first psychiatric facility for the care of mentally ill patients in Oman was started with one psychiatrist at Al Rahma Hospital, Muscat, in 1975. Initially, the Psychiatric Unit consisted of an outpatient clinic in a makeshift three-room block and a small ward having five beds. Almost at the same time, the psychiatrist at Al Rahma Hospital started monthly visits to Sultan Qaboos Hospital in Salalah, where he would conduct an outpatient clinic for three days. In April 1976, a 30-bed ward was started for male patients, initially to accommodate 16 patients from Jalali Fort. In January 1979, a psychiatrist was permanently posted at Sultan Qaboos Hospital, Salalah, in charge of the outpatient clinic and five beds for acute psychiatric cases. In view of the progressive increase in the number of patients seeking psychiatric care (in 1980, there were 656 new cases, 6209 total registered attendance) a 60-bed facility named Ibn Sina Hospital was inaugurated in November 1983.

Mental health facilities and personnel

Facilities

The mental health care facilities consist of the Ibn Sina Hospital, near Muscat, regional referral hospitals and the Department of Behavioural Sciences at Sultan Qaboos University Medical School.

Ibn Sina Hospital is the only inpatient psychiatric facility. It is located 25 km west of Muscat. It is a 60-bed facility with two male wards and one female ward that house acute as well as chronic psychiatric patients and severely mentally retarded children and adolescents. Two senior consultants, two specialists, two junior specialists, five medical officers, nursing staff and three social workers staff it. The hospital is equipped with an electroencephalogram, X-ray, laboratory and two small occupational therapy units for male and female patients.

Psychiatrists are stationed in seven regional referral hospitals in Salalah, Sohar, Nizwa, Ibri, Rustaq, Ibra, Sur, Musandam and Buraimi. Each of these psychiatrists has access to four beds in the local general hospital for their patients, except in Salalah, where 10 beds are available.

The Sultan Qaboos University Medical School has a Department of Behavioural Sciences with about 15 psychiatric beds in the university hospital. These are exclusively training beds, and the facility functions outside the regular health system.

There is a small 15-bed facility for the mentally retarded managed by the Ministry of Social Affairs.

A referral system exists between the first, second and third levels of care.

There has been a growing awareness of the drug abuse problem since 1972. The main drug of abuse, initially, was *charas* (cannabis). Between 1974 and 1980, the use of opiates, alcohol and psychotropic drugs was also seen. From 1982, there have been some cases of heroin dependence. Cases of cologne drinking, glue sniffing and shoe polish sniffing have been reported.

Training programmes

Fifty students every year graduate from Sultan Qaboos University Medical School. Students are taught behavioural sciences in the first year of training and subsequently receive clinical training in psychiatry.

Nursing training has only theoretical classes and very little practical training.

A joint postgraduate psychiatric residency programme (Sultan Qaboos University and Ibn Sina) is also available for the training of doctors.

National mental health programme and related policies

Objectives and strategies

The national mental health programme of Oman was discussed and finalized in a national workshop in March 1990 with participation of professionals and planners from a wide range of disciplines and sectors. The essential drugs policy has been in operation since 1975 and the narcotics and substance abuse policy has been formulated in 1999. The objectives of the

national mental health programme are: provision of mental health care for all; prevention, treatment, rehabilitation and promotion of mental health and quality of life by adopting culturally sound and relevant psychosocial and behavioural principles at work, in family life and in the community.

The main strategies identified are: integration of mental health services in general health care; development of an administrative structure for mental health; a school mental health programme; involvement of religious teachers; services for the mentally retarded; programmes for substance abusers; training of professionals; mental health education for the community; and operational research.

Progress

The national mental health programme has been actively implemented in Oman. The integration of mental health with general health care has been achieved by the following steps: preparation of a manual for medical officers on mental health care; standard operating procedures for the management of psychiatric cases (in print); biannual training programmes for primary health physicians—these three-week training programmes emphasize knowledge, skills and positive attitudes; a review workshop in October every year in order to assess the progress of the national mental health programme and development of community-based psychiatric care in Oman; development of a referral system linking the different levels of care; regional workshops in psychiatry, which are regularly held for the training of primary health care staff from every region of the country for primary management of psychiatric cases. Over 150 personnel have been trained.

School mental health programme

Education administrators, schoolteachers and schoolchildren constitute a large portion of the literate population, particularly in the rural areas, and hence, exert tremendous influence on community attitudes and behaviour patterns, including popular ideas and beliefs on health and disease. This resource can be exploited in school mental health programmes, by inculcating a positive attitude towards mental health and illness among the community by using the school system as a social tool of change. School health workers, selected teachers and students are given special training in

workshops to attain skills so that they can recognize and help those in need of special education and parents and teachers who need counselling in dealing with children. Children are taught simple slogans aimed at modifying their attitude. Such slogans are also propagated among the community through banners, posters, advertisements in newspapers and magazines, stickers and stamps printed on school homework notebooks.

Research

Research studies using routine hospital data have been carried out. A study conducted in 1995 showed that poor compliance and irregularity in taking medicines were the main causes of relapses of chronic psychiatric cases in Oman. Distance from hospitals also contributed to poor attendance record and poor compliance with treatment. The conclusion of this study was that strengthening of the primary health care services near patients' homes was essential.

Legislation

Royal decree 17/99 was issued in 1999 for control of narcotics and psychotropic substances.

Summary update (*Mental health atlas, 2005*)

Epidemiology

Chand et al (2001) conducted an 8-year retrospective analysis of hospital records of cases with dissociative disorder. These disorders were common, and female predominance was not marked. The most common presentations were dissociative convulsions, dissociative motor and dissociative trance disorders. Zaidan et al (2002) reviewed Accident and Emergency records over a 6-year period and found 123 cases of deliberate self-harm. Most patients with deliberate self-harm were women, students and unemployed. Analgesic (paracetamol) use was the preferred method followed by other non-pharmaceutical chemicals. Al Adawi et al (2002) used the Eating Attitude Test and the Bulimic Investigatory Test to assess eating disorders in Omani teenagers, non-Omani teenagers and Omani adults. On the Eating Attitude Test, 33% of Omani teenagers (29.4% females and 36.4% males) and 9% of non-Omani teenagers (7.5% of males and 10.6% females)

showed anorexia-like behaviour. On the Bulimic Investigatory Test, 12.3% of Omani teenagers (13.7% females and 10.9% males) showed a propensity for binge eating or bulimia. Among the non-Omani teenagers, 18.4% showed bulimic tendencies with females outnumbering males. Only 2% of Omani adults showed any problems related to eating behaviours. Kenue et al (1995) assessed 492 children (<15 years of age) and found that 2% had disabilities related to chromosomal abnormality, genetic, perinatal and infectious factors. Down syndrome was present in 31% of children with chromosomal abnormalities.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1992. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1999. The Royal Decree 17/99, Law on Control of Narcotics and Psychotropics was formulated in 1999. The components of the policy are prevention, treatment, rehabilitation and advocacy.

National mental health programme

A national mental health programme is present. The programme was formulated in 1990. The national mental health programme was revised in 1992. It envisages to provide mental health care for all through the primary, secondary and tertiary level, taking into account measures for prevention, treatment, promotion and rehabilitation and keeping in view the culture, family and community. The aim was to involve the whole community along with religious teachers, incorporate programmes for the mentally retarded and substance abusers and train professionals. A review workshop is held every year to assess the progress of the national mental health programme.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1975.

Mental health legislation

There is no specific mental health legislation. The provision of mental health care is an essential component of the National Health Policy as contained in the policy statement issued by the Ministry of Health in 1992. The Royal Decree 17/99, Law on Control of Narcotics and Psychotropics was formulated in 1999.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are tax-based, private insurance and out-of-pocket expenditure by the patient or family. Psychiatric services are provided free of charge to most Omani patients.

The country has disability benefits for persons with mental disorders. Disability benefits are provided by the Ministry of Social Affairs to all Omani nationals who have physical or mental disorders.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is not available at the primary level. Primary care and referral services are available. Patients with severe psychiatric disorders are referred to secondary and tertiary levels and managed at primary level only after they are stabilized.

Regular training of primary care professionals is carried out in the field of mental health. In 2003–2004, about 250 personnel were trained. Besides training during residency, there are some training facilities for nursing graduates and some for primary care doctors. The training programme for primary care doctors is held on a regular basis along with regional workshops. The Ministry of Health has published a manual for primary health care professionals, which lays down the standard operating policy for primary management of psychiatric problems.

There are community care facilities for patients with mental disorders.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.49
Psychiatric beds in mental hospitals per 10 000 population	0.28
Psychiatric beds in general hospitals per 10 000 population	0.21

Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	1.4
Number of neurosurgeons per 100 000 population	0.4
Number of psychiatric nurses per 100 000 population	5
Number of neurologists per 100 000 population	0.25
Number of psychologists per 100 000 population	0.25
Number of social workers per 100 000 population	0.5

There are 15 other mental health professionals. Besides the central psychiatric hospital near Muscat, there are psychiatrists at the nine regional hospitals, eight of which have four beds for psychiatry. There are also beds allotted to other major hospitals and universities. There is a 15-bed facility for the mentally retarded under the Ministry of Social Affairs with training schools for the handicapped. Some beds are earmarked for female patients.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion and rehabilitation.

Information gathering system

There is a mental health reporting system in the country. The country has a data collection system on mental health.

Programmes for special populations

The country has specific programmes for mental health for minorities, elderly and children.

There is a school mental health programme that involves participation of administrators, school teachers, school children. The programmes are mainly concentrated in rural areas and they are educated through lectures, debates, essay competitions, posters, etc. School health workers and teachers are given some training in order to pick up certain behavioural problems and learning disorders.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, chlorpromazine, diazepam, haloperidol. Procyclidine and maprotiline are

available through the primary health care system. Other psychotropics, except atypical anti-psychotics, are also available through primary health care centres if they are prescribed by secondary and tertiary centres.

Additional sources of information

Al Adawi S et al. Presence and severity of anorexia and bulimia among male and female Omani and non-Omani adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2002, 41:1124–1130.

Chand SP, Koul R, Al Hussaini AA. Conversion and dissociative disorders in the Sultanate of Oman. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2001, 40:869–870.

Kenue RK et al. Cytogenetic analysis of children suspected of chromosomal abnormalities. *Journal of tropical pediatrics*, 1995, 41:77–80.

Zaidan ZAJ et al. Deliberate self-poisoning in Oman. *Tropical medicine and international health*, 2002, 7:549–556.

Pakistan

Overview

Pakistan comprises four provinces: Baluchistan, North-west Frontier Province, Punjab and Sind, in addition to the federally administered tribal areas and federal capital territory of Islamabad. It is bordered by China, Afghanistan, Islamic Republic of Iran and India, having a population of 151.8 million (excluding an estimated 3–4 million Afghan and Bangladeshi immigrants) and an area of 796 095 km².

Population growth rate is 1.9%, 43.4% of the population is under 15 years of age and 3.5% above 65 years of age (2001). Total adult literacy rate is estimated at 53%, and adult female literacy rate is estimated at 42% (2001). The crude birth rate is estimated at 27.3 per 1000 population and the total life expectancy at birth is estimated at 63 years (2002). The infant mortality rate is estimated at 80 per 1000 live births (2002), maternal mortality ratio 35.0 per 10 000 live births, and under-5 mortality rate 103 per 1000 live births (2001). The per capita gross national product is US\$ 495 and the Ministry of Health budget is 3.5% of the national budget (1999). The per capita expenditure on health by the Ministry of Health is US\$ 4 as compared to the national expenditure of US\$ 15. The rates for physicians, dentists, nurses/midwives and beds per 10 000 population are 7.3, 0.4, 4.7 and 6.8, respectively (2003).

The National Ninth Five-Year Development Plan (1998–2003) and prospective plan for 2003–13 emphasized the qualitative improvement of primary health care services, developing public–private–nongovernmental organization partnerships, community involvement in planning,

implementation and monitoring of services while following the principles of equity, efficiency and effectiveness.

Health network

The existing network of health services in the public sector consists of 865 hospitals, 4523 dispensaries, 4484 basic health units, 513 rural health centres and 262 tuberculosis centres. There were 89 929 hospital beds and 78 470 registered doctors, 3159 dentists, 28 661 nurses, 4589 lady health visitors, 42 000 lady health workers and 21 840 midwives (December, 1996).

Mental health

At the time of Pakistan's creation in 1947, there were only three mental hospitals, at Lahore, Hyderabad and Peshawar, and a psychiatric unit at the Military Hospital in Rawalpindi. It was during the 1960s and 1970s, with the development of effective methods of treatment, biological and psychosocial, that psychiatric units were gradually established in all the medical colleges of the country. Provision of mental health services is currently reliant on 320 psychiatrists based in major urban centres. Departments of psychiatry have been established in all the 18 public medical colleges and four of the 19 private medical colleges in the country.

At the undergraduate level, behavioural sciences have been incorporated into the curricula of all the medical schools in Pakistan. An indigenous behavioural sciences teaching module has been developed for medical students, and a demonstration project of community-oriented medical education with a significant stress on behavioural sciences was initiated in 1998 in four of the public sector medical colleges, one in each province of the country.

The College of Physicians and Surgeons, Pakistan is the main certifying body for postgraduate training in psychiatry, having a four year training programme leading to fellowship in psychiatry. In addition universities also offer MDs and diploma training courses for shorter durations.

There are two centres at Lahore and Karachi for training of clinical psychologists, and they train about 20 clinical psychologists every year. Currently about 400 clinical psychologists are available in the country.

Psychiatric nursing is being offered as a separate subject at all the nursing institutions in the country, and a curriculum for psychiatric nursing has been developed. At the undergraduate level psychiatry is taught during second, third and fourth years of training along with practical training. A two-year postgraduate diploma for psychiatric nursing has been initiated in nurses training colleges in the country, and so far 52 psychiatric nurses have qualified. In addition, 287 nurses have been trained at the Institute of Psychiatry, Rawalpindi, in community psychiatric nursing.

There is no provision for training of psychiatric social workers at the university departments. Thirty social welfare officers have received training at the Institute of Psychiatry, Rawalpindi, as part of the human resources development initiative.

Epidemiological studies carried out in Pakistan have shown that 10%–66% of the general population suffers from mild to moderate psychiatric illnesses in addition to the 0.1% suffering from severe mental illnesses.

Prevalence of severe mental retardation in children between 3 and 9 years of age has been estimated at 16–22 per 1000.

According to recent estimates, there are 4 million substance abusers in Pakistan (2000). The most common substance of abuse is heroine (49.7%), and 71.5% of the abusers are below 35 years of age. There are about 232 facilities for drug detoxification all over the country.

In the light of the above facts it is evident that it will not be possible in the foreseeable future to realize the objective of the national programme of mental health if reliance is placed exclusively on specialized human resources.

The national mental health programme of Pakistan was the first one in Eastern Mediterranean Region to be developed, in 1986 at a multidisciplinary workshop, and incorporated in the seventh, eighth and ninth five-year national development plans. It aims at universal provision of mental health and substance abuse services by their incorporation in primary health care. The strategies for realizing this aim are:

- teaching and training of personnel at all tiers of primary health care and incorporation of mental health and behavioural sciences in the curricula of health, education, social sciences and law enforcement institutions

- strengthening of existing centres and establishment of new psychiatric centres
- streamlining adequate referral services and provision of essential drugs
- a multidisciplinary approach, intersectional collaboration (with social services, nongovernmental organizations and the private sector) and linkage with community development.
- rapid expansion and development of specialized human resources base.

Progress of work

In order to realize the aims of the national mental health programme, a national coordinating group comprising psychiatrists, psychologists, economists, public health experts and policy-makers has been set up. The priority areas for action were identified as follows.

Development of a model of mental health care delivery integrated within primary health care

This model was initially developed in two subdistricts of Rawalpindi, and is being replicated in parts of all provinces of the Pakistan. Most of the policy-level and field-level administrators have been provided with orientation in the field of mental health, including those from the armed forces, which has resulted in the setting-up of mental health training programmes as part of the ongoing in-service training programme of district health development centres. These centres have been set up to build the capacity of primary care personnel to handle common health problems by organizing on-the-job training for them. Mental health has been included in the regular programmes of training being run by these centres in Punjab and over the coming years it will be expanded to the other provinces. More than 2000 primary care physicians have so far been trained in mental health. Similarly training manuals have been prepared for local health volunteers, local health workers and multipurpose health workers, and so far more than 40 000 have received training all over the country, in a decentralized manner, under the District health development centres initiative. So far, more than 65 junior psychiatrists have been trained in community mental health in order to act as resource persons in development of community mental health

programmes in their areas and to provide the training, referral and evaluation support to integration of mental health in primary health care. In addition to psychiatrists from Pakistan, mental health professionals from Egypt, Islamic Republic of Iran, Morocco, Nepal, Palestine, Sudan, Tunisia and Yemen have been trained in community mental health, to act as resource persons in their respective countries.

A national essential drugs list has also been formulated which includes all the essential neuropsychiatric drugs included in the WHO list.

Another major development has been the acceptance in principle to include indicators for mental illnesses as part of the national health management information system. This is a crucial development for integrating mental health into primary health care.

The government of Pakistan has now agreed to fund the integration of mental health in primary health care on a national scale and a separate budget has been allocated for this purpose.

Human resources development

See the above sections.

Intersectoral collaboration for promotion of mental health and prevention of neuropsychiatric illnesses

Development of a school mental health programme. During the demonstration phase it was realized that schools can play an effective role in stimulating community efforts for mental health care provision. This realization led to the development of a school mental health programme. The programme is both child- and environment-centred and works through a series of four phases: familiarization, training, reinforcement and evaluation to achieve its objectives.

During 2000, a mental health component was included in teacher-training programmes at national level. So far more than 150 education administrators from all provinces have been provided with orientation training.

Training of master trainers from all provinces (batches of 40 for four months each) would start from January 2001. Text book boards of all provinces are being approached for inclusion of mental health issues in the school curricula being prepared by them.

Activities with faith healers. Faith healers and religious leaders are the first port of call for the majority of the mentally ill patients. Thus the potential benefits of involving the faith healers, rather than antagonizing them, in the provision of mental health services are manifold, foremost being the perception by the community that services are in line with their health belief system. After the initial reservations were overcome, a relationship beneficial to the mentally ill in the community was forged. One particular research project in this regard is worth mentioning which shows that about 25% of the patients presenting to faith healers in a subdistrict of 0.5 million were given “medical diagnoses” and referred to the nearest health facility, a significant departure from past practices.

Activities with nongovernmental organizations. Nongovernmental organizations are taking on an increasingly important role in developmental activities. The National Rural Support Programme is an organization active in the field of income generation, education, agriculture, forestry, tourism and health, having access to about 20 000 village-level organizations. The programme and its sister organizations have agreed to include mental health among all its activities and about 20 000 community activists will be trained each year through this initiative, highlighting the role of mental health in national development activities.

Research and publications

Lack of indigenous research has been a major hindrance in rational planning and allocation of resources, however over the last few years a number of research papers have been published. The major areas of research activity include: mental health policy research, epidemiological research, health systems research, economic evaluation of models of mental health care delivery, development and validation of research instruments, evaluation of intersectoral linkages, and clinical research.

Legislation

The government of Pakistan has repealed the mental health act of 1912–26. A new mental health law embodying the modern concept of mental illnesses, treatment, rehabilitation, and civil and human rights was promulgated on 20 February 2001.

It can be safely concluded that in Pakistan mental health is making progress towards its goal of integration of primary health care.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Mumford et al (1996, 1997) used the Bradford Somatic Inventory to screen a general population sample in two rural areas. Further interviews were conducted using ICD-10 research diagnostic criteria. About 46% and 66% of women and 15% and 25% of men suffered from anxiety and depressive disorders. Emotional distress was associated with age, social disadvantage (in both genders), living in unitary households (in women) and lower education (in younger subjects). Ahmad et al (2001) used the Bradford Somatic Inventory (BSI) and Self-Reporting Questionnaire (SRQ) in another rural sample ($n = 664$) and found that 72% of women and 44% of men were suffering from anxiety and depressive disorders. BSI and SRQ scores had negative correlations with socioeconomic factors. In contrast, in an urban slum sample only 25% of women and 10% of men had depression and anxiety (Mumford et al, 2000). Emotional distress was associated with age (in both genders), less education (in younger women) and low financial status (in women) as in the previous study, but in the urban setting women living in joint households reported more distress than those living in unitary families. Husain et al (2000) conducted a two-phase survey of a rural general population sample, employing the Personal Health Questionnaire and the Self-Rating Questionnaire for screening ($n = 259$) and the Psychiatric Assessment Schedule and Life Events and Difficulties Schedule for detailed assessment. The adjusted prevalence of depressive disorders was 44.4% (25.5% in males and 57.5% in females). Nearly all cases had lasted longer than 1 year. In comparison to non-cases, the affected individuals were less well educated, had more children and experienced more marked, independent chronic difficulties. Rabbani and Raja (2000) interviewed 260 mothers in an urban squatter settlement with the Aga Khan University Anxiety and Depression Scale (AKUADS) and found probable mental disorder in 28.8%. Psychiatric morbidity was associated with older age group, longer duration of marriage, interpersonal conflicts with husband or in-laws, husband's unemployment, lacking permanent source of income and

lack of autonomy in making decisions. Khan and Reza (2000) conducted a 2-year analysis of reports related to suicide in a major newspaper in Pakistan ($n = 306$ suicides reported from 35 cities). Prevalence of suicide was associated with gender (male), age (under 30 years) and marital status (unmarried for men and married for women). More than half the subjects used organophosphate insecticides. Khalid (2001) analysed the pattern of suicide in a region based on newspaper reports ($n = 1230$ news-items) and found a similar profile. Males adopted more violent methods (61.20%) while females more often ingested chemicals (35.20%). Khan and Reza (1998) reviewed records of 262 female and 185 male suicidal inpatients. Three quarters of the suicidal persons were under the age of 30 years. Compared to men, women were younger and more often married. Benzodiazepines were the commonest drugs used for self-poisoning among both genders, but women used organophosphorus insecticides more often than men. Javed et al (1992) used the Rutter Scale and found emotional and behavioural disorders in 9.3% of children. Yaqoob et al (1995) assessed a stratified sample ($n = 1303$) of urban children from 2 to 24 months of age for serious mental retardation ($DQ < 50$). The incidence per 1000 live births was 22 in the peri-urban slums, 9 in the urban slums, 7 in a village and 4 in an upper middle class group. Down syndrome was the most common cause of severe mental retardation (36%). Durkin et al (1998) conducted a two-stage survey of 2–9 year-old children obtained via cluster sampling ($n = 6365$) using the Ten Questions screen for disabilities and structured medical and psychological assessments. Prevalence of mental retardation was 1.9% for serious retardation and 6.5% for mild retardation. Lack of maternal education, perinatal difficulties, neonatal infections, postnatal brain infections and injury and malnourishment were associated with mental retardation. Bashir et al (2002) identified mild mental retardation in 6.2% of children in a community sample of 6–10 year olds by a two stage method using the Ten Questions as a screening tool ($n = 649$ families), psychometric tests (WISC-R and Griffiths) and clinical interviews. The distribution of mild mental retardation was uneven, the prevalence being 1.2% among children from the upper-middle class, 4.8% in the rural setting, 6.1% in urban slums and 10.5% in the poor peri-urban slums. Additional impairments were found in

three quarters of the children with mental retardation, of which speech impairment was the most common.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1997. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation. Intersectoral collaboration is also a component of the policy. The mental health policy envisages to train primary care providers, to establish resource centres at teaching hospitals and psychiatric and detoxification centres, to set up monitoring and evaluation systems and to prepare training and teaching modules. Special facilities would be established for mentally handicapped. Crisis intervention and counselling services for special groups of population would be started. Large mental hospitals would be reorganized and upgraded.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1997. It includes interventions for both reduction of supply and demand. The policy is being implemented by the Planning Commission of the Government of Pakistan.

National mental health programme

A national mental health programme is present. The programme was formulated in 1986. The national mental health programme is a part of the general health policy of the country and is aimed at incorporating mental health in primary care, removing stigma, caring for mental health and substance abuse patients across the country and maintaining principles of equity and justice in the provision of mental health and substance abuse services. It was fully implemented in 2001. It does not have a specific suicide reduction plan.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1997.

Mental health legislation

In February 2001, a new mental health ordinance 2001 was enacted. The new ordinance puts emphasis on promotion of mental health and prevention of mental illness. It provides encouragement to community care and proposes the establishment of powerful federal mental health authority by the Government. It provides protection of the rights of the mentally ill and promotion of the mental health literacy. It also provides the guidelines for the development and establishment of new national standards for the care and the treatment of patients. Informed consent for treatment and investigations can be obtained from the patient or his/her relatives.

Mental health financing

There are budget allocations for mental health. The country spends 0.4% of the total health budget on mental health. The primary sources of mental health financing in descending order are out of pocket expenditure by the patient or family, tax-based, social insurance and private insurance.

The country has disability benefits for persons with mental disorders. Disability benefit is paid to individuals who are not able to work due to mental illness.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is available at the primary level. The programme has initially started in Punjab, the largest province, in 1985 and is being extended to others over the years. There are many residential and day-care facilities, especially for people with learning disabilities providing social, vocational and educational activities.

Regular training of primary care professionals is carried out in the field of mental health. Training programmes have started in the province of Punjab as a part of in-service training for primary care personnel. Till now, approximately 2000 primary care physicians and 42 000 primary care workers have been trained. Community activists from nongovernmental organizations (e.g. National Rural Support Programme (NRSP) are also being trained. Although there are training programmes for physicians, nurses and psychologists, there are no such facilities for social workers. Mental health training has been included in the programme of the District Health Development Centres. The Institute of Psychiatry Rawalpindi Medical

College was the first WHO collaborating Centre for mental health in the Eastern Mediterranean Region and is acting as a resource centre at national and regional level for training, services information system and research. Multiple training manuals for primary health care physicians, paramedics, community workers and teachers have been developed. In an additional training package on counselling skills for health professionals, a package for rehabilitation of the mentally ill has been developed. Personnel from Afghanistan, Egypt, Islamic Republic of Iran, Morocco, Nepal, Palestine, Sudan, Tunisia and Yemen have been trained in the Institute of Psychiatry. The National Steering Committee evaluates the quality of care delivery on a regular basis.

There are community care facilities for patients with mental disorders. The community mental health programme was planned in a phased manner. The first phase included collection of data pertaining to demographics, knowledge, attitudes and beliefs about mental health and sensitization of the community towards mental health. The second phase involved training of personnel in mental health. The third phase involved stimulation of community activities through advocacy campaigns using religious leaders and developing a workable referral system. In the final phase, qualitative changes were incorporated in the services and steps were taken to improve the knowledge of the population about mental health. The programmes have been initiated in all provinces but have not been generalized to the whole population. More than 78 junior psychiatrists have been trained in community mental health to act as resource persons in the development of programmes in their areas.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.24
Psychiatric beds in mental hospitals per 10 000 population	0.06
Psychiatric beds in general hospitals per 10 000 population	0.148
Psychiatric beds in other settings per 10 000 population	0.02
Number of psychiatrists per 100 000 population	0.2
Number of neurosurgeons per 100 000 population	0.2
Number of psychiatric nurses per 100 000 population	0.08
Number of neurologists per 100 000 population	0.14
Number of psychologists per 100 000 population	0.2

Number of social workers per 100 000 population 0.4

There are about 2000 other mental health personnel. There are four mental health hospitals in the country. All medical colleges have psychiatric units. Psychiatric units are also present in allied hospitals in both public and private sector. Some psychiatric care facilities are available at the tehsil level. Beds for the treatment of drug abusers are available at most hospital facilities (232 centres). Forensic beds are available at a few centres. There are two child psychiatrists in the country. Mental health professionals are concentrated in big urban centres. Most psychiatrists have private clinics.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention, treatment and rehabilitation. Some of the nongovernmental organizations like the Fountain House have done exemplary work in order to build the foundation of rehabilitation psychiatry in Pakistan. A concept of agrotherapy for the rural population has evolved. Recently, the organization the National Rural Support Programme decided to include mental health among their activities.

Information gathering system

There is no mental health reporting system in the country. A mental health reporting system has been initiated in the National Health Management Information System (HMIS). The country has a data collection system or epidemiological study on mental health. An information system for using in tertiary facilities has been developed at the WHO Collaborating Centre at Rawalpindi. It has been agreed that the HMIS will collect information from primary care centres on depressive illness, substance abuse and epilepsy.

Programmes for special populations

The country has specific programmes for mental health for refugees and children. Nongovernmental organizations are involved in service provision and advocacy for the above groups. Afghan refugees are being provided with services by international organizations. There are also facilities for women and victims of torture.

There are some facilities for children in the larger hospitals and regional hospitals, but the most parts of the country have no facilities for child and adolescent psychiatry. There are many residential and day care facilities for people with learning disabilities, especially in big cities. There is a school mental health programme and it aims to develop awareness of mental health among schoolchildren, schoolteachers and the community; to provide essential knowledge about mental health to teachers so that they are able to impart that to the students and are able to recognize and provide some counselling to the students for basic psychological problems. Its positive impact has been evaluated and published in international journals. Mental health issues have been incorporated in the teacher training programme at the national level. Text book boards have been approached for inclusion of mental health topics in school curricula.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, chlorpromazine, diazepam, haloperidol. Imipramine is supplied instead of amitriptyline. Procyclidine is supplied.

Other information

Active community research has been conducted regarding mental health in the last few years which has been published. The innovative community mental health programme included the faith healers. Human resources development at national and international level has been carried out. Print as well as electronic media have been utilized to spread mental health education. Collaboration with schools and nongovernmental organizations like the National Rural Support Programme has been established. Public educational material on sleep disturbance, anxiety disorder, phobias, drug dependence, depression and psychosis is available. Pakistan is actively involved in developing guidelines for economic analysis of community mental health care programmes in low-income countries.

Additional sources of information

Ahmad I, Saeed K, Mubbashar MH et al. Minor psychiatric morbidity and socio-economic factors. *Medical forum monthly*, 2001, 12:5–8.

Bashir A, Yaqoob M, Ferngren H et al. Prevalence and associated impairments of mild mental retardation in six- to ten-year old children in Pakistan: a prospective study. *Acta paediatrica*, 2002, 91:833–837.

Durkin MS, Hasan ZM, Hasan KZ. Prevalence and correlates of mental retardation among children in Karachi, Pakistan. *American journal of epidemiology*, 1998, 147:281–288.

Monograph on mental health institute of psychiatry and WHO collaborating centre for mental health research and training, Cairo, Regional Office for the Eastern Mediterranean, 2000.

Gadit AA, Khalid N. State of mental health in Pakistan. Hamdard University. Karachi, 2002.

Gater R, Rehman ChU. Mental health and service developments in the Rawalpindi district of Pakistan. *Journal of college of physicians and surgeons Pakistan*, 2001, 11:210–214.

Husain N, Creed F, Tomenson B. Depression and social stress in Pakistan. *Psychological medicine*, 2000, 30:395–402.

Javed MA, Kundi MZ, Khan PA. Emotional and behavioural problems among school children in Pakistan. *Journal of the Pakistan Medical Association*, 1992, 42:181–183.

Karim S, Saeed K, Rana MH. Pakistan mental health profile. *International review of psychiatry*, 2004, 16:83–92.

Khalid N. Pattern of suicide: causes and methods employed. *Medical forum monthly*, 2001. 12:27–29.

Khan MM, Reza H. Gender differences in nonfatal suicidal behaviour in Pakistan: significance of sociocultural factors. *Suicide and life-threatening behavior*, 1998, 28:62–68.

Khan MM, Reza H. The pattern of suicide in Pakistan. *Crisis. Journal of crisis intervention and suicide*, 2000, 21:31–35.

Mental Health Programme Country Report of Pakistan for Regional Consultation on World Health Report, 2000.

Ministry of Health report of the sub-committee on health and substance abuse. Planning Commission. Government of Pakistan, 1998.

Ministry of Health Mental Health Policy. Ministry of Health Government of Pakistan, 1997.

Mubbashar MH, Saeed K. Developing models of balanced mental health care: the case of Pakistan. *World psychiatry*, 2002, 1:100–101.

Mubasshar MH. Development of mental health services in Pakistan. *International psychiatry*, 2003, 1:11–13.

Mumford DB. Stress and psychiatric disorder in rural Punjab - A community survey. *British journal of psychiatry*, 1997, 170:473–78.

Mumford DB, Minhas FA, Akhtar I et al. Stress and psychiatric disorder in urban Rawalpindi. Community survey. *British journal of psychiatry*, 2000, 177:557–562.

Mumford DB, Nazir M, Jilani F-U-M et al. Stress and psychiatric disorder in the Hindu Kush. A community survey of mountain villages in Chitral, Pakistan. *British journal of psychiatry*, 1996, 168:299–307.

Mumford DB, Saeed K, Ahmad I et al. Stress and psychiatric disorder in rural Punjab: a community survey. *British journal of psychiatry*, 1997, 170: 473–478.

Rabbani F, Raja FF. The minds of mothers: maternal mental health in an urban squatter settlement of Karachi. *Journal of the Pakistan medical association*, 2000, 50:306–312.

Yaqoob M, Bashir A, Tareen K et al. Severe mental retardation in 2 to 24-month-old children in Lahore, Pakistan: a prospective cohort study. *Acta paediatrica*, 1995, 84:267–272.

Yousaf F. Psychiatry in Pakistan. *International journal of social psychiatry*, 1997, 43: 298–302.

Occupied Palestinian Territory

Overview

There are an estimated 3.82 million Palestinians living in the Gaza Strip and West Bank, (in addition 3 million reside abroad) which together cover an area of 6162 km², 49% of whom are urban residents. By age, 46% of the population is below 15 years and 3.1% above 65 years (2003). The registered refugee population is distributed in the “fields of operation”, as follows: Lebanon, 319 000; Syrian Arab Republic, 299 000; Jordan, 1 011 000; West Bank 459 000; and Gaza Strip 560 000.

In 2002, the adult literacy rate and the female adult literacy rate were estimated at 91% and 86%, respectively. Infant mortality rate is estimated to be 24 per 1000 live births, under-5 mortality rate 28.5 per 1000 live births, maternal mortality ratio 2.1 per 10 000 live births, crude birth rate 27.2 per 1000 population, and total life expectancy at birth 72.3 years (2003). Respiratory diseases are still the leading causes of morbidity and mortality among children and infants (health status indicators for registered refugees are generally worse with higher infant mortality rates, and crude birth rates, i.e. 30–40 per 1000 and 44.4 per 1000, respectively but maternal mortality rates and under-5 mortality are lower—2.5 per 10 000 and 28.1 per 1000, respectively while literacy rates are about the same according to UNRWA data). Per capita gross national product in Palestinian Authority areas is US\$ 1784, and the Authority allocates 5% of its total budget for health, which comes to 2.5% of gross national product. Per capita expenditure on health by the Ministry of Health is US\$ 39 while nationally it is US\$ 143.

The rates for physicians, dentists, nurses/midwives and hospital beds per 10 000 population are 8.3, 0.8, 13.1, and 12.5, respectively (2003).

Coupled with an increased level of tension and unrest, the adverse effects of the continuing conflict situation, loss of employment opportunities due to mass immigration of Russians to Israel, restrictions on movement of the population and extended curfews, the unemployment (and underemployment) rate is estimated to be 30%–40% in the Gaza Strip and in the inner parts of the West Bank (1997).

Because of the dispersal of the Palestinian people across different areas and as a result of the lack of a unified political authority, there is no unified health policy or strategy; rather, the various bodies providing services have their own characteristics. In addition to the public health services available in the countries of residence and those provided by the Palestinian Authority, the main providers of health care for the Palestinian population are the Palestinian Red Crescent Society and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

UNRWA's health system is organized at three levels. At the primary level, outpatient services are provided, where protective/promotive services are combined with curative medical services and are supplemented by activities to ensure proper nutrition and improved environmental health in the refugee camps.

At the secondary level, referral and support services comprise inpatient care at subsidized hospitals, as well as specialist and rehabilitative care and other basic support services through contractual arrangements or individual patient subsidies. At this level, UNRWA also provides partial subsidy towards the cost of prosthetic devices required to improve the capacity of disabled persons. There is a small UNRWA-operated cottage hospital in Qalqilia, West Bank, inherited from the Red Cross in 1950, which has lately been extended with the addition of an operating theatre and is in the course of being upgraded.

The Palestinian Red Crescent Society established in 1986 and adopted in 1990 a national health plan for the Palestinian population, in coordination with responsible officials in health centres inside the occupied territories as well as with other Palestinian health institutions beyond their borders.

This plan is based on the development of:

- infrastructure and management of the various Palestinian health institutions
- primary health care facilities through the expansion of existing ones, as well as training of required human resources and purchase of necessary equipment
- a mental health programme
- rehabilitation centres
- a health human resources plan
- a drug policy (together with preparation of a list of essential drugs)
- construction and administrative organization of hospitals
- encouraging international societies as well as local organizations to be more involved in health matters.

The Palestinian Red Crescent Society runs 16 hospitals (with a total of 1500 beds), 45 field hospitals, 200 clinics, 15 maternal and child health centres, 20 dental clinics, 10 rehabilitation centres, 3 nursing schools, 15 blood banks and 28 laboratories. Health staff associated with the Palestinian Red Crescent, at present, number 364 physicians, 41 dentists and 280 nurses, in addition to 405 health technicians serving the Palestinian population outside the occupied territories. A growing number of behavioural disorders have been observed, especially among young people, who account for 69% of those wounded during civil disobedience. Moreover, the present situation of continued pressure, occupation and military action against civilians which, has been going on for decades and has become much worse recently, is expected to bring much harm to the psychosocial and behavioural development of the population, especially children.

According to a special committee of experts that reported to the World Health Assembly in 1989, the health situation of the Palestinian population has remained disturbing, despite the praiseworthy efforts made by the health workers concerned. The committee found that this situation was largely associated with the lack of a structured health system designed to provide appropriate primary, secondary and tertiary care. This, in turn, is largely due to the fact that the health system is not specific to the territories, nor is it independent, but is regarded as an extension of the Israeli system. This dependency is at the root of the non-existence of long-term health planning,

which can be undertaken only within the framework of an economic and social development plan, and in the present situation, this can only be the Israeli plan.

Since the start of the *intifada*, many people's committees have been formed in villages, towns and refugee camps to help the implementation of health programmes. These committees are concerned with health and social, emergency and ambulatory services. Furthermore, syndicates, unions, religious groups and charitable and voluntary organizations contribute to the implementation of health programmes such as those for safe drinking water, sanitation, environmental health, health education, immunization and maternal and child health activities and campaigns. In addition, *intifada* committees have played a vital role in combating drug trafficking and addiction and in distribution of food rations during curfew periods.

Mental health

Epidemiological data on mental illness among the Palestinian population are not available. However, reports by psychiatrists working in some of the field areas, reports of brief visits by child mental health consultants and results of an exploratory study confirm that there is a high frequency of mental health problems in the refugee population. The Director of Mental Health Services, Gaza, reported in 1989 that there was a high incidence of hysteria, anxiety, depression and psychosocial problems presenting with somatic complaints. Discussing the increasing incidence of mental health problems, the report says that:

... scattered throughout the world, the Palestinians do not feel at home anywhere. They are unwanted everywhere and are regarded as a source of potential trouble. Their anger and fear are turned into aggression. Daily life is a continuous story of fighting. Violent demonstrations are common occurrences in the life of Gaza and the West Bank. Cases of anxiety, depression and psychotic reactions are frequently seen following confrontations. Children's problems like outbursts of temper and aggressive behaviour, sleep disturbances and anxiety are also on the increase.

In 1989 UNRWA in collaboration with Rädga Barnen (Save the Children, Sweden) carried out a research study of psychosocial problems in children (health centre interviews, home interviews and child observation) in Jabal al Hussein and Marka refugee camps in Amman, Jordan, which also confirmed the high frequency of psychosocial disturbances among the children. These disturbances were noted to be partly due to lack of stimulation.

Against this background, in June–July 1989, a WHO short-term consultant reviewed the situation and developed a draft mental health programme for UNRWA in 1989. It has the following objectives: to provide essential mental health care, which includes not only treatment and prevention of mental disorders, but also promotion of mental health, for all the refugee population; to enhance the use of mental health knowledge, skills and attitudes in general health care and in social development; to add mental health inputs into education and the school health services for amelioration and prevention of social, behavioural and learning problems among children, and to promote healthy psychosocial development of every refugee child; and to encourage community participation in the development of mental health services and generate self-help in the community.

Strategies and approaches identified were integration of mental health with existing services; training of personnel; mental health tasks for different categories of personnel; strengthening of the mental health infrastructure and building of a referral system; provision of essential drugs for mental health care; development of an information system; services for special groups such as mentally retarded children, preschool children, schoolchildren; rehabilitation care for drug-dependent persons; and administrative support.

The essential first step envisaged for the mental health programme implementation was the appointment of a core officer/group responsible for mental health at UNRWA headquarters. This core officer/committee would assess priorities in mental health as part of general health and welfare programmes, facilitate provision of know-how for the mental health programme and allocate resources and monitor the programme. Similarly, at the field operations level, a mental health programme coordination committee could be constituted with representation from the curative and preventive medical care, nursing, education and relief services sections of

UNRWA and other related sectors. The implementation of the mental health programme in each field area was to be the responsibility of this committee.

Progress

The recognition of the mental health needs of the refugee population outlined above has resulted in a number of positive developments. The Gaza community mental health programme was established in 1990 in order to meet the most immediate needs by providing effective psychosocial therapy for affected children and their families; devise training programmes for mental health workers and other community workers (teachers, social workers, health workers and others) in mental health; conduct research to document and contribute to the understanding of the psychological, psychosocial, psychopolitical and psychiatric problems in Gaza; establish a multidisciplinary team of professionals and paraprofessionals to form the basis for the comprehensive ongoing mental health programme; provide preventive, curative and rehabilitative services for the population of the Gaza Strip; develop a focal point in the Eastern Mediterranean Region for the exchange of information, staff and students from other centres around the world for increasing the understanding of mental health and psychosocial issues of displaced populations; and through a programme of public education, raise the general public's awareness of mental health issues. Community mental health programmes have trained 28 psychiatric social workers, 24 psychiatric nurses, 24 primary care doctors, 24 teachers, 144 child care workers and 25 nongovernmental organization staff in mental health. A manual has been developed in country for physicians, primary care workers and schoolteachers. Innovative approaches developed are in the areas of school mental health, nongovernmental organization initiatives and the formation of self-help groups.

Mental health facilities

There are two psychiatric hospitals, in Gaza with 34 beds (started in 1979) and in the West Bank with 320 beds (started in 1960). There are two general hospital psychiatric units at Nablus and Tulkarm with four inpatient beds each (established in 1980). There are no private psychiatric hospitals. There is a child mental health clinic and the Gaza Community Mental Health

Centre. There are no specialized drug dependence treatment centres. Nongovernmental organizations such as the Swedish International Relief Association run facilities for the mentally retarded.

Mental health human resources

There are 18 psychiatrists, of whom 15 are in government service and 3 in private practice. There are 40 clinical psychologists—13 in government service and 27 in the private sector. There are 17 trained social workers and 72 trained psychiatric nurses are working in the country. An important development has been the deputation of four medical officers of UNRWA for specially planned mental health training at WHO collaborating centres in Manchester, UK, and Bangalore, India. These four medical officers completed their training in 1992 and returned to work with the Palestinian population.

The training of undergraduate medical students consists of 20 hours of lectures, 20 hours of clinical work and posting during internship. Psychiatry is included as an examination topic as part of general medicine practices. There is no mental health specialist training facility in the country. In September 1995, a research methodology workshop on priorities of mental health services was conducted. The future priorities identified were epidemiological studies of mental health problems in adults and children; drug dependence and trauma-related disorders.

Recent developments

During the past decade a large number of studies have reported high levels of psychosocial problems among children and adolescents, women, refugees and prisoners. A study conducted by the Gaza Community Mental Health Programme on the prevalence of post-trauma stress disorders (PTSD) among children 10–19 years of age revealed that 32.7% suffered from a high level of PTSD needing psychological intervention, 49.2% suffered from moderate PTSD symptoms, 15.6% suffered from a low level of PTSD and only 2.5% had no symptoms. Boys had higher rates (58%) than girls (42%) and children living in camps suffered more than children living in towns (84.1% and 15.8% respectively).

In a report from the University of Geneva on Palestinian perceptions of their living conditions during the second *intifada*, it was observed that 46% of parents reported aggressive behaviour among their children, 38% noted bad school results, 27% reported bedwetting, while 39% stated that their children suffered from nightmares. The study also revealed that more refugee children (53%) than non-refugee children (41%) behave aggressively: 38% of the respondents said that shooting was the main influence, 34% stated that it was violence on television, 7% cited confinement at home and 11% specified that it was the arrest and beating of relatives and neighbours; 70% of refugees and non-refugees stated that they had not received any psychological support for the problems of their children.

Save the Children (United States) and the Secretariat of the National Plan of Action for Palestinian Children in collaboration with Save the Children (Sweden) conducted an assessment of the state of well being of Palestinian children in the occupied Palestinian territory. The majority of sampled children (93%) reported feeling unsafe and exposed to attack. They feared not only for themselves but also of their family and friends. Almost half of the children (48%) had personally experienced violence. One out of five children (21%) had moved out of their homes. Children in the Gaza Strip were generally more affected than children in the West Bank. Children in urban and refugee camp settings were also more affected than children in rural areas. More than half the children (52%), especially the somewhat older children in the sample (59%), felt that their parents can no longer fully meet their needs for care and protection. Care givers (mainly parents and teachers) themselves were stressed and frustrated, having less emotional and mental energy to provide the necessary psychosocial support to their children. 65% of parents reported significant interaction with their children through dialogue, 12% reported some interaction, while 23% of parents did not have any meaningful interaction. Nine out of ten parents reported symptomatic traumatic behaviour among their children, ranging from nightmares and bedwetting, to increased aggressiveness and hyperactivity, as well as a decrease in attention span and concentration capacity.

In a series of studies over the past 10 years by the Gaza Community Mental Health Centre, the following findings are reported:

- the more traumatic experiences children had, the more they participated in the *intifada*, and the more there were concentration, attention and memory problems, as well as increased neuroticism and risk-taking behaviour along with decreased self-esteem;
- greater exposure to traumatic events was associated with children perceiving their parents as disciplinarian, rejecting and hostile, with boys perceiving their parents more negatively than girls;
- the more traumatic events children experienced, the more political activity they were involved in, and the more they suffered from psychological adjustment problems, although good parenting was protective to children;
- the level of neuroticism was significantly lower after the peace treaty of 1993, and the more creative children were, the more their neurotic symptoms decreased because of the peace treaty;
- adults exposed to house demolition showed higher levels of anxiety, depression and paranoid symptoms than those only witnessing demolition and the control group, while women suffered more symptoms than men and the findings were similar in children;
- the most prevalent types of trauma exposure for children were witnessing funerals (95%), witnessing shooting (83%), seeing injured or dead strangers (67%) and having a family member injured or killed (62%);
- among children living in the area of bombardment, 54% suffered from severe PTSD, 33.5% moderate levels and 11% mild and doubtful levels, with girls being more vulnerable;
- men experienced more traumatic events, but exposure was associated with more severe psychiatric disorders among women, while peritraumatic dissociation as an acute response to trauma constituted a risk for mental health symptoms in both men and women.

Among studies of general medical practitioners, focused on attitudes to mental illness, the ability to detect mental disorders among primary care patients and the characteristics of PTSD among patients attending primary health care facilities in the Gaza Strip, older doctors had significantly more traditional attitudes than the younger doctors. General practitioners detected only 12% of patients with mental disorders, while those with postgraduate

training, female doctors and those over 40 years old had better detection rates. The overall prevalence of PTSD symptoms in primary health care patients was 29%, and was higher among females and those exposed to traumatic events.

The current situation regarding the mental health needs of the population of the occupied Palestinian territory can best be described as an area of high recognition and need with limited care programmes. Over the past few years there has been high recognition of the need for psychosocial/mental health care of the Palestinian population living in the West Bank and the Gaza Strip. A large number of initiatives have been undertaken by UNRWA, the Ministry of Health of the Palestinian Authority and a large number of nongovernmental organizations. Coordination of the mental health activities of the Ministry of Health and UNRWA has been initiated. There has been increasing utilization of mental health services by the population from 2000 onwards, with an average increase of 20% annually, despite the stigma about mental disorders. Evaluation has been done of the work of psychosocial counsellors and mid-course correction made of the UNRWA psychosocial programme.

The mental health needs of the Palestine refugees can be considered under three broad groups. The first is the need for services related to the psychiatric illnesses (schizophrenia, manic depressive psychosis, depression, substance abuse, epilepsy, mental retardation, etc.) which are known to be prevalent in about 5% of the population. These conditions are important as they contribute to the global burden of diseases (about 12% in 2001) and effective interventions are available to provide care to this group of persons. Early interventions can reduce disability and promote recovery. Care of persons with these disorders can be undertaken both by the mental health specialists and for some, e.g. epilepsy, by primary health care personnel.

The second is the need for services to address behavioural changes and the common mental disorders that are present among those seeking primary health care. Most studies have shown this to range between 10% and 20% of the general medical clinic population. Most of these disorders are related to psychosocial stress factors in the lives of patients. This group of patients most frequently present with somatic complaints and are not recognized as having nonphysical problems by general medical personnel. In

one study in the Gaza Strip, the recognition rate was only 12%. Nonrecognition often leads to unnecessary investigations and use of nonspecific medicines, such as analgesics and vitamins, without benefit to the patients. In addition, this group is known to utilize primary health care more than those with physical disorders. There is another group of patients, including those with diabetes, hypertension and cancer, in which psychosocial factors play an important role. In both these groups of patients coming to primary health care, a number of interventions are known to be effective. The interventions can range from patient education about the link of physical complaints to life situation (reinterpretation), teaching of relaxation, providing opportunities for sharing of feelings and problems, counselling, problem-solving skills, group-work and use of tranquillisers/antidepressants for limited periods of time. All of these interventions can be undertaken by both the medical officers and other staff, such as nurses, at primary health care facilities.

The third group of mental health needs is for services to address the psychological reactions in the general population (especially children and youth), that are a result of living with the wide variety of stresses associated with being a refugee and living in a situation of occupation. There are studies showing that this is an important area for mental health intervention. Interventions for this large group of people are more focused on preventive and promotive activities. These can be undertaken at the general population level through community-level interventions, at the family level and at the individual level in settings such as schools and health facilities.

Additional sources of information

Qouta S, El-Saraj E. Community mental health as practiced by the Gaza community mental health programme. In: Jong JD. *Trauma, war, and violence: public mental health in sociocultural context*, Kluever Academic/Plenum Publishers, New York, 2002.

Thabet AA, Vostanis P. Social adversities and anxiety disorders in the Gaza Strip, *Archives of disease in childhood*, 1998, 78:439–442.

Zakrisson TL et al. The prevalence of psychological morbidity in West Bank Palestinian Children, *Canadian journal of psychiatry*, 2004, 49:60–63.

Thabet AA, Vostanis P. Post-traumatic stress reactions in children of war, 2000. www.gcmhp.net/research/Post_traumatic.html

Qouta S, Punamaki RL, El Saraj E. Prevalence and determinants of PTSD among Palestinian children exposed to military violence, *European Journal of child and adolescent psychiatry*, 2003, 12:265–272.

Thabet AA, Vostanis P. Effect of trauma on the mental health of Palestinian children and mothers in the Gaza Strip, *Eastern Mediterranean health journal*, 2001, 7:413–421.

Qatar

Overview

Qatar has a surface area of 11 493 km². The country is flat except for some hills and high ground to the northwest. The population is 656 000 and the entire population resides in urban areas (2004). The proportion of the population below 15 years of age and above 65 years of age is 26.6% and 1.3%, respectively (2002). In 1997, the total adult literacy rate and the female adult literacy rate were estimated at 83% and 81%, respectively. The infant mortality rate is estimated at 8.7 per 1000 live births, under-5 mortality rate 10.2 per 1000 live births, average life expectancy at birth 74.7 years, crude birth rate 19.8 per 1000 population and maternal mortality ratio 0.0 per 10 000 live births (2002). The per capita gross domestic product in 2003 was US\$ 29753.

The per capita Ministry of Health expenditure is US\$ 731.4 as compared to the national expenditure of US\$ 935 (2003). The Ministry's expenditure represents 7% of the government total expenditures (2003). There are an estimated 23.5 physicians, 3.6 dentists, 54.8 nurses/midwives and 23.6 hospital beds, respectively per 10 000 population (2002). Of the physicians employed by the Ministry of Health, 46% are working in primary health care delivery. Similarly, 30% of nurses are working in primary health care services. A nursing college has recently been established in Qatar.

Almost all hospital services in Qatar are controlled by a private medical corporation—the Hamad Medical Corporation. Recently, a planning committee, comprising representatives of the various departments of the Ministry of Health, as well as of hospitals, was established as a nucleus for a

national planning committee for health development. The licensing commission for private clinics has been reorganized in such a way that it enables the public sector to play a supervisory role over private sector activities, especially where primary health care services are delivered.

The primary health care services and peripheral health clinics are run by the Ministry of Health. In recent years, in addition to establishing new health centres, the following steps have been taken to reorient services towards primary health care:

- school health services have become the responsibility of the Ministry of Health and form part of the activities of the Directorate of Primary Health Care
- a new Division for Childhood Immunization has been established in the Ministry of Health to cover immunization against the six diseases of childhood targeted by the expanded programme on vaccination: diphtheria, measles, mumps, pertussis, poliomyelitis and tetanus
- health education has become part of health centres' activities; the necessary health promotion leaflets have been prepared for their use.

Mental health

Background

A psychiatric service was first established in Qatar in 1971, soon after the country's independence. In 1983, the Department of Psychiatry having 18 beds for male patients and 12 for female patients moved to Rumaillah Hospital as a part of Hamad Medical Corporation. At that time, most of the treatment activities were centred on general psychiatry and liaison psychiatry. Now the central psychiatric facility located at the Rumaillah Hospital has 220 beds. This facility houses the Departments of Psychiatry, Rehabilitation, Mental Retardation, Special Education and Geriatric Medicine. The Department of Psychiatry, besides providing mental health care to the whole country, also works with three other psychiatric services, those of school health, the armed forces and the police force. The armed forces polyclinic has a consultant psychiatrist. The police force polyclinic has a consultant psychiatrist.

There are 5 psychiatrists, 7 residents in psychiatry, 10 social workers, 8 psychologists, 43 nurses and one counsellor as part of the mental health care system at the central psychiatric facility.

At present, all inpatient admissions are informal; and a 24-hour telephone line for patients and families, is planned.

National mental health programme and policy

The substance abuse policy was formulated in 1986, and the therapeutic and essential drugs policy has been in operation since 1980. The national mental health programme was introduced in 1990 and stresses those areas related to the community care system in mental health. This will include action plans to be implemented in the following areas.

- upgrading of family health physicians' knowledge and skills through ongoing periodical courses on mental health
- establishment of legislation where not available and amendment if needed
- family involvement in patient care, early detection of morbidity and reducing stigma through raising public awareness
- counselling programmes in school health with the aim of dealing with psychosocial problems and scholastic failures; special education and teacher training is also included.

Progress

The Department of Psychiatry at Rumaillah Hospital has been accredited to the Arab Board Training Programme since 1993. Seven physicians are enrolled in this active training programme, and four of them recently obtained their qualification after passing the final exam. Besides the Arab Board Training Programme, the Department also receives trainees from the University of Qatar who are studying for the diploma in psychological counselling. The Department also takes physicians from the primary health care and dermatology department as part of their internship training programme. Over 15 personnel have been trained.

Database

A computerized database information system covering all psychiatric clinical services is available.

Legislation

There is no formal mental health act in Qatar as yet. It is therefore left to the discretion of the civil or religious courts to arbitrate in consultation with psychiatrists when controversy arises. Psychiatry, in turn, plays only an advisory role with recommendations on the matter. It is planned to establish a mental health act for Qatar.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is substantial epidemiological data on mental illnesses in Qatar in internationally accessible literature. No attempt was made to include this information here.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1980. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1986.

National mental health programme

A national mental health programme is present. The programme was formulated in 1990. The national mental health programme stresses legislation, family involvement, primary health care and counselling programmes.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1980.

Mental health legislation

Details about the mental health legislation are not available.

Mental health financing

There are budget allocations for mental health. The country spends 1% of the total health budget on mental health. The primary source of mental health financing is tax-based. The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is a part of the primary health care system. Actual treatment of severe mental disorders is not available at the primary level. Primary care is provided to a small number of centres. All psychiatric drugs are dispensed except for controlled drugs. Drug abuse patients are referred to the psychiatric clinics and only referrals from the catchment areas are seen. Generally, psychologists attend and handle referrals on-site.

Regular training of primary care professionals is carried out in the field of mental health. In the last two years, about 15 personnel were trained. Training courses for physicians from primary health care and dermatology are held.

There are community care facilities for patients with mental disorders. A community nursing service was started in 1993 and domiciliary visits for assessments and home management of patients in liaison with their families have started. There are also day-care centres at certain hospitals which impart stress control, assertive training, job training, family education, increase self knowledge, rehabilitate institutionalized chronic patients and carry out family-oriented educational programmes.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.97
Psychiatric beds in mental hospitals per 10 000 population	0.97
Psychiatric beds in general hospitals per 10 000 population	0
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	3.4
Number of neurosurgeons per 100 000 population	0.8
Number of psychiatric nurses per 100 000 population	10
Number of neurologists per 100 000 population	1

Number of psychologists per 100 000 population	1.2
Number of social workers per 100 000 population	10

There are three other mental health professionals of different categories. Beds have been earmarked for women patients and for services related to rehabilitation, mental retardation, special education and psychogeriatrics.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in treatment.

Information gathering system

There is mental health reporting system in the country. The country has data collection system or epidemiological study on mental health. A computerized database information system covering all psychiatric clinical services includes modern diagnostic criteria and information on treatment and referral outcomes are possible, but only in the capital city.

Programmes for special populations

The country has specific programmes for mental health for elderly and children. There are facilities for imparting mental health services to schools. There are also ambulatory child psychiatry facilities. Psychogeriatric services consist of an inpatient service with follow-up protocol.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, ethosuximide, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, carbidopa, levodopa.

Other information

Qatar's psychiatric service was established in 1971. Almost all hospital services are controlled by the Hamad Medical Corporation, which is a government corporation.

Additional sources of information

El-Islam MF. Psychiatry in Qatar. *Psychiatric bulletin*, 1995, 19:779–781.

Saudi Arabia

Overview

Saudi Arabia has an area of 2 250 000 km² and a population of 22.68 million (2004). The population of people below 15 years of age and above 65 years of age is estimated at 40.8% and 3.1%, respectively; the total adult literacy rate and the female adult literacy rate were 80% and 72%, respectively (1999).

The crude birth rate is 31 per 1000 population (2003). The total life expectancy is estimated at 71.4 years (2001). The infant mortality rate is estimated at 19.1 per 1000 live births, under-5 mortality rate 30 per 1000 live births and maternal mortality ratio 1.8 per 10 000 live births (2000). The per capita gross national product is US\$ 8014 (2002). In 2001, the government allocation for the Ministry of Health was 7.1% of the budget and 3% of the gross national product. The per capita spending on health by the Ministry of Health is US\$ 266 (2002). There are an estimated 15.3 physicians, 1.9 dentists, 32.3 nurses/midwives and 22.4 beds per 10 000 population (2001).

Mental health

Historical aspects

The development of mental health care in Saudi Arabia can be seen to fall into two clear phases. Until 1983, mental health care in the country was mainly provided by the Taif Mental Hospital. This was a hospital meant for 250 patients, but serving a larger number (for example, in 1978, there were 1800 patients). This also meant that patients had to travel long distances to

obtain mental health care. This often resulted in delays in seeking care and, problems of discharge into the community.

After 1983, a shift occurred in the form of setting-up of smaller-sized (20–120 beds) psychiatric hospitals all over the country along with outpatient clinics. The next phase envisages further integration of mental health with primary health care.

Mental health facilities

Taif Hospital has 570 beds. There are 14 other mental hospitals with a bed capacity of 30–120 beds in other parts of the country, isolated from the general hospitals and working independently. Psychiatric departments and clinics attached to general hospitals total 61 in number, having 20–30 beds each.

There are three Amal Hospitals with 280 beds each under the joint administration of the Ministries of Health and Interior for treatment of persons with alcohol and drug dependence. In 1996, a unit attached to the general hospital in Qassim, was opened for treatment of substance abuse with a bed capacity of 20 beds. There are, in addition, 165 beds for psychiatric inpatients in other governmental health sectors, such as military, national guard and university hospitals. There are many private units and 146 beds in general private hospitals for psychiatric care, as well as outpatient services. Six school health units provide some psychiatric services in Riyadh, and other such units are planned in other regions after training of the staff in the School Health Unit of the Ministry of Health.

Rehabilitation services for persons with mental disorders are planned but are currently concentrated in the private and nongovernmental organization sector.

The services for the mentally retarded consist of beds in Taif and other mental hospitals. There are secure sections for the treatment of mentally ill offenders in Taif and some other mental hospitals.

At present, child psychiatric services are delivered mainly on an outpatient basis, and emergency cases can be admitted to paediatric departments or to general hospitals under the supervision of the nearest psychiatrist.

Integrated data are available for services in all mental hospitals, general hospitals, psychiatric units and outpatient clinics. These data are compiled from returns by the psychiatrists from each centre. Between 1991 and 1996, there was an increase of about 26% in outpatient attendance, including new contacts. Similarly, there was an equal increase in both first admissions and readmissions to inpatient care. This indicates that for a number of reasons that need to be more deeply studied, the services are being increasingly used by the population.

Mental health human resources

There are about 458 psychiatrists in the country. Of these, 286 are working in Ministry of Health facilities, 108 in other governmental sectors and 64 in the private sector. There are a disproportionate number of expatriates: there are only 78 Saudi psychiatrists. There are 183 social workers working in mental hospitals. There are 108 psychologists working in Ministry of Health facilities, and 1271 nurses. All the psychologists and social workers are Saudi nationals, but the majority of nurses are not.

Mental health training

There are four universities with medical schools—King Saud University, Riyadh; Jeddah; Abha; and King Faisal University, Dammam. There are approximately 270 new medical graduates per year.

There are two postgraduate programmes in psychiatry, one at King Faisal University and the other at King Saud University. Gradually, more Saudi nationals are taking up psychiatry. There are also training programmes in the psychiatric units in military hospitals, national guard hospitals and King Faisal Specialist Hospital in Riyadh.

National mental health programme

The Saudi national mental health programme was developed in 1989. The objectives of the programme are:

- to make essential mental health services available to all citizens and residents in the country, paying more attention to those who are more in need of these services and to underserved areas

- to develop a mental health care model in keeping with the social, cultural and religious values of the country
- to encourage community participation in the development of mental health care services
- to use mental health knowledge and skills in order to help solve psychosocial problems, and to encourage the application of mental health principles for promotion of social health and enhancing socioeconomic development of society, as well as improving the quality of life
- to decrease the untoward impact of social and economic development on society such as drug abuse, smoking, delinquency and crime.

Strategies for the programme are:

- integration of mental health services with general health services
- supporting the present mental health services and making these services available in all areas and providing mental health services to the more vulnerable groups
- incorporating mental health services into primary health care through existing health staff by suitable additional training
- linking the primary health care centres to mental health services and to teaching centres through a series of referral systems
- training and supervising by mental health professionals of the medical personnel who will form the treatment teams at primary health care level
- providing the essential neuropsychiatric drugs at primary health care level
- cooperating with non-health sectors (community leaders, nongovernmental organizations, religious establishments, and so on) in planning and implementation of the programme.

Progress

A Directorate of Mental and Social Health has been created in the Ministry of Health. It is clear the primary health care level is the principal avenue through which mental health services can reach those in the community most in need of them

The Directorate has set up a training programme for the mental health component of primary health care. The programme has been undertaken as follows. First, a training manual was prepared and sent to all centres that are staffed by Ministry psychiatrists. Second, a series of workshops has been set up to train psychiatrists in how to improve the skills of primary health care physicians in the recognition and management of common mental disorders. A third initiative has been taken jointly by the Directorates of Primary Health Care and of Mental and Social Health. They require all medical staff in primary health care centres throughout the country to attend a training programme on the recognition and management of common mental disorders. The details of such training courses vary between regions. A common pattern is to have the doctors meet the psychiatrists, either at the primary health care centre or a hospital, for a few hours a week for two months and all must attend at some stage; Most primary health care physicians and nurses are not Arabic speakers, but all other staff are Saudi, which makes communication with the psychiatric patients possible. All antidepressants and neuroleptics and some anti-epileptics are exempt from the controlled drug list, and only minor tranquillizers (benzodiazepines included) and hypnotics remain controlled. Primary health care physicians are allowed to prescribe only non-controlled drugs.

Liaison with agencies outside the health field

There have been encouraging efforts made through the Directorate of Mental and Social Health to develop educational programmes with schools, the police and other sectors. The impression is that more activity should be considered with the police, who are an indisputably important pathway to care. Similarly, consideration might be given to increasing dialogue and collaboration with religious leaders, teachers and local authorities.

Community education

Advocacy and public awareness campaigns and programmes are carried out during the events like World Mental Health Day in October every year and this will be continued. Health education is mainly the responsibility of a special department in the Ministry of Health, which carries out all health educational programmes, including mental health educational programmes.

Traditional healers

Traditional healers or sheikhs (respected persons) continue to play a large part in mental health care, and this includes the treatment of some common neurotic disorders. Some psychiatrists working in the provinces work in close contact with traditional and religious healers and sometimes a great deal of useful collaboration between them exists.

Legislation

A mental health act, already prepared, is awaiting formal approval from the legislation. It has been formulated after consideration of similar legislation in many countries and recommendations from the United Nations and the World Health Organization. This document contains the basic regulations for admission and discharge in mental hospitals, beside the main human rights of the psychiatric patient. The Directorate has developed and is using a manual of processes and regulations for all mental health institutions in the country until the mental health act is approved.

Drug dependence

Saudi Arabia is fortunate that its culture, religion and policies have, up to the present, ensured a low level of drug- and alcohol-dependence problems. The Amal Hospitals concentrate more on prevention, early recognition and family counselling programmes.

Future plans

- To continue establishing outpatient clinics in the general hospitals and to upgrade some of these clinics to psychiatric units with a limited number of beds (20–30).
- To revise and update the national mental health programme according to progress and experiences gained since 1989.
- To collaborate with the Directorate of Health Centres of the Ministry of Health for the integration of mental health care into primary health care services by training of trainers and primary health care physicians in the regions and also to prepare another manual for training of the non-medical staff in the primary health care centres (60 master trainers have been trained so far and 2000 primary health care

physicians have been trained by them until 1998 using an indigenously developed manual).

- To provide more psychological counselling and guidance centres in the general hospitals in other regions after the successes achieved in the Riyadh region.
- To foster coordination and collaboration between the Directorate of Mental and Social Health and other institutions and agencies for the implementation of the primary mental health care programme, especially with the Ministry of Education and General Presidency of Girls for training in school health units.
- To organize training programmes for psychiatrists, psychologists and social workers in collaboration with the universities, health institutes and some big mental health hospitals

Summary update (*Mental health atlas*, 2005)

Epidemiology

Al-Khatami and Ogbeide (2002) evaluated 609 adults, selected randomly from a family and community clinic at an Armed Forces hospital, using the Rahim Anxiety-Depression Scale. The prevalence of minor mental morbidity was 18.2% (women: 22.2%, men: 13.7%). Rates were higher among the young (15–29 years: 23.2%), divorcees and widows (more than 40%) and among those suffering from bronchial asthma (28.3%). El Rufaie et al (1999) estimated the prevalence of somatized mental disorder (SMD) and psychologized mental disorder (PMD) in a sample of primary health care patients using the 12-item General Health Questionnaire and the Clinical Interview Schedule. SMD and PMD constituted 48% and 42% of those identified with a psychiatric disorder, respectively. The estimated prevalence rate of SMD was 12% and it was associated with less education and less severe disorders. The most common ICD-10 psychiatric diagnoses among both the groups were mixed anxiety and depressive disorder, generalized anxiety disorder and mood and adjustment disorders. Recurrent depressive disorder and dysthymia were significantly more prevalent in the PMD group. El-Rufaie et al (1988) used the Arabic version of the Hospital Anxiety and Depression Scale (HAD) in primary care patients and found the prevalence rate of depression and anxiety to be 26% (17% had depression

and 16% had anxiety). The rate of depression was higher among females and that of anxiety among males. Al-Shammari and Al-Subaie (1999) assessed 7970 elderly (above 60 years) subjects who were selected from primary health care in five administrative regions by a stratified two-stage sampling procedure using the Geriatric Depression Scale (GDS) and clinical evaluation. Depressive symptoms were reported by 39%, with 8.4% having severe depression. Depression was associated with gender (female), education (low), unemployment, marital status (divorced or widowed), locality (rural), housing arrangements (poor), isolation, financial constraints, life events (loss), participation in recreational activities (limited), medical illness (especially faecal or urinary incontinence), medication, perception of poor health and dependence on others for daily activities. Elfawal (1999) reviewed hospital data on suicides and estimated its prevalence to be 1.1/100 000 population. It was associated with gender (male:female ratio was 4.5:1), age (30 to 39 years: 44.3%), ethnicity (all immigrants: 77%, Indians: 43%). The most common means of suicide were hanging (63%). Malik et al (1996) found that more than four fifths of drug overdose cases ($n = 57$) were self-inflicted (parasuicide). Parasuicide was associated with age (more than 95% were below 40 years), ethnicity (Saudi: 89%) and gender (females: 78%). Psychiatric illnesses were diagnosed in 74.4% of cases, with depression (39.5%) and personality disorders (34.9%) being common. Abolfotouh (1997) assessed 305 schoolboys aged 8–12 years using the Rutter Children's Behaviour Questionnaire. The prevalence of behaviour disorders was 13.4% and it was associated with family size, crowding index, parents' education, birth order, parental death, social class and poor academic performance of index child. These factors jointly contributed to 12.8% of the variance in total behaviour score. However, mother's illiteracy was the only significant predictor of maladjusted children. Al-Subaie et al (1996) validated the Arabic version of the Eating Attitude Test (EAT-26) and assessed a representative stratified random sample of grade 7–12 urban female students ($n = 129$). Twenty-five were identified by EAT-26 as having abnormal eating attitudes. One case was identified as having anorexia nervosa and no cases of bulimia were found. Milaat et al (2001) assessed children (below 15 years) selected through a multistage sampling of households ($n = 875$) using the ten questions survey. The point prevalence of

any disability was 3.7%. Three-fifths of cases had a single disability, one-fifth had two conditions and one-fifth had three or more conditions. Speech, motor and mental disabilities were the commonest disabilities identified.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1989. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 2000.

National mental health programme

A national mental health programme is present. The programme was formulated in 1989. The national mental health programme aims at integrating mental health into primary and community care, developing a model keeping in view the social, cultural and religious values of the country in perspective, using mental health principles in promoting social health, decreasing untoward impact of social and economic development on society like drug abuse, smoking, delinquency and crime.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1988.

Mental health legislation

A mental health act is awaiting approval. The General Directorate for Mental Health has developed a manual of procedures and regulations for mental health institutions in the country until the mental health act is approved.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary source of mental health financing is tax-based. Development of psychiatric services is

incorporated in the budget of general health services. The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. All anti-depressants and neuroleptics and some anti-epileptics are exempt from control and so all primary care physicians can prescribe most of the drugs.

Regular training of primary care professionals is carried out in the field of mental health. The General Directorate for Mental Health has a well designed training programme for the mental health component of primary health care. There are training manuals and workshops for psychiatrists on methods how to train primary care personnel. All medical staff of primary care services is required to attend training programmes on the recognition and management of common mental disorders. The immediate and post-training evaluations of the trainees show favourable changes in their attitude and knowledge and enhanced motivation to practice psychiatry at primary health care centres. A system of ongoing training is needed because the majority of primary care doctors are expatriates (predominantly from neighbouring Arab states).

There are community care facilities for patients with mental disorders. Rehabilitative services were planned following a Royal decree in 1988 but it mainly concentrated among private organizations and self help groups like the Patients' Friends Committee, etc.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.18
Psychiatric beds in mental hospitals per 10 000 population	0.8
Psychiatric beds in general hospitals per 10 000 population	0.04
Psychiatric beds in other settings per 10 000 population	0.34
Number of psychiatrists per 100 000 population	1.1
Number of neurosurgeons per 100 000 population	0.5
Number of psychiatric nurses per 100 000 population	6.4
Number of neurologists per 100 000 population	0.07
Number of psychologists per 100 000 population	0.97
Number of social workers per 100 000 population	2.4

There are 22 other mental health staff belonging to different categories. There are three Amal hospitals which take care of patients with problems with drug abuse. They collectively have 840 beds. Some beds have been earmarked for mentally retarded individuals and mentally ill offenders. About three fourths of the psychiatrists and a majority of nurses are expatriates. Traditional healers and religious healers play an important part in mental health care.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention, treatment and rehabilitation.

Information gathering system

There is mental health reporting system in the country. The country has data collection system or epidemiological study on mental health. There are no epidemiological studies, but data are available for all services.

Programmes for special populations

The country has specific programmes for mental health for children. Child psychiatric services are mainly provided as out-patient care and emergency cases are admitted in paediatric hospitals or general hospitals. Six school units are operational in Riyadh.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, ethosuximide, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium, biperiden, carbidopa, levodopa.

Other information

Until 1983, mental health care was mainly provided by the Taif mental hospital, but since then smaller hospitals and outpatient clinics have been set up. The next phase would involve integration of mental health into primary care.

Additional sources of information

Abolfotouh MA. Behaviour disorders among urban schoolboys in south-western Saudi Arabia. *Eastern Mediterranean health journal*, 1997, 3:274–283.

Al-Faris E, Al-Subaie A, Khoja T et al. Training primary health care physicians in Saudi Arabia to recognize psychiatric illness. *Acta psychiatrica Scandinavica*, 1997, 96:439–444.

Al-Khathami AD, Ogbeide DO. Prevalence of mental illness among Saudi adult primary-care patients in central Saudi Arabia. *Saudi medical journal*, 2002, 23:721–724.

Al-Shammari SA, Al-Subaie A. Prevalence and correlates of depression among Saudi elderly. *International journal of geriatric psychiatry*, 1999, 14:739–747.

Al-Subaie A, Al-Shammari S, Bamgboye E et al. Validity of the Arabic version of the Eating Attitude Test. *International journal of eating disorders*, 1996, 20:321–324.

Elfawal MA. Cultural influence on the incidence and choice of method of suicide in Saudi Arabia. *American journal of forensic medicine and pathology*, 1999, 20:163–168.

El-Rufaie OE, Albar AA, Al-Dabal BK. Identifying anxiety and depressive disorders among primary care patients: a pilot study. *Acta psychiatrica Scandinavica*, 1988, 77: 280–282.

El-Rufaie OEF, Al Sabosy MMA, Bener A et al. Somatized mental disorder among primary care Arab patients: I. Prevalence and clinical and sociodemographic characteristics. *Journal of psychosomatic research*, 1990, 46:549–555.

Malik GM, Bilal A, Mekki TE et al. Drug overdose in the Asir region of Saudi Arabia. *Annals of Saudi medicine*, 1996, 16:33–36.

Milaat WA, Ghabrah TM, Al-Bar HMS et al. Population-based survey of childhood disability in eastern Jeddah using the ten questions tool. *Disability and rehabilitation*, 2001, 23:199–203.

Qureshi NA, Al-Ghamady S, Al-Haddad NS et al. Integration of mental health care into primary care. *Saudi medical journal*, 2001, 22:899–906.

The national scientific committee of mental health in primary health care. *National manual for primary mental health care*, 1996.

Somalia

Overview

Somalia has a surface area of 637 657 km². The topography of the country varies from mountainous in the north, calcareous highlands in the west, and arid plateaus in the east. Population estimates show a population density barely in excess of one person per km² at 8.3 million (2004). The population is relatively young, with 44.8% below the age of 15 years and 2.7% above the age of 65 (2000). The urban population makes up 25% of the total. The total adult literacy rate and the female adult literacy rate, in 2002, were 19% and 13%, respectively. United Nations sources estimated the crude birth and crude death rates to be 46.4 and 17.6 per 1000 population, respectively, for 2003. Somalia has the world's second highest infant mortality rate and the second highest ratio of maternal mortality. These are estimated at 120 per 1000 live births (2003) and 160 per 10 000 live births (2000), respectively. The under-5 mortality rate was estimated at 224 per 1000 live births in 2000. Total life expectancy at birth is 49 years (1998), one of the lowest in the world.

The major health problems are communicable diseases (tuberculosis, measles, malaria, sexually transmitted diseases), diarrhoeal diseases, schistosomiasis, tetanus, respiratory infections, obstetrical problems, anaemia and leprosy. The per capita gross national product is US\$ 192. Somalia is designated by the United Nations as a least developed country. The first point of contact for health care, at the village level, is the primary health care post, staffed by one locally recruited community health worker and one traditional birth attendant. Next in line is the primary health care

unit, which serves from 10 000 to 15 000 persons and is staffed by one public health nurse, one nurse midwife and one sanitarian.

The district health centre, which is staffed by one senior physician among others, is responsible for four primary health care units and covers from 40 000 to 60 000 persons. The regional health centre is in effect the district health centre of the regional capital. Governmental health curative services are offered at district and regional hospitals. Regional hospitals vary in size, from 50 to 200-bed capacity. Each of the 18 regions has one regional hospital and there are two public hospitals in the Banadir Region. The specialized hospitals number 17, comprising 10 tuberculosis hospitals, three mental hospitals, two leprosy hospitals and one paediatric and obstetric hospital. The district hospitals follow more or less the administrative map of the country. The usual capacity ranges from 10 to 20 beds. In addition to hospitals, there are 411 primary health care posts, 50 primary health care units and 94 maternal and child health centres (reported at the end of 1990). In 1997, Somalia had a reported ratio of 0.4 physicians, 2 nurses and 4.2 beds per 10 000 population.

Until 1990, the primary health care programme was working in nine regions, with an additional seven regions receiving partial coverage. Because of security-related deterioration in various regions few of the urban hospitals are now functioning and virtually none of the rural ones is operational.

Financial as well as human resources are inadequate, and Somalia depends almost entirely on external sources for health financing.

Mental health

There is one mental hospital in the country, in Berbera on the northern coast. This hospital has patients living in cells 1 metre × 2 metres with iron bars and chains. There is no provision of medicines, clothes or even food. Whatever food the patients get is through public charity, which can be very erratic. There is no provision for any kind of activity by the patients, the basic hygiene is deficient, psychotropic drugs are almost non-existent and often, the only treatment available is electroconvulsive therapy. The nursing staff is inadequate and poorly trained. Opportunities for recreation and occupational therapy are practically non-existent. The criminal patients are mixed along with other patients.

The psychiatric section at Forlinini Hospital, Mogadishu, is part of a chronic diseases set-up, which includes tuberculosis and leprosy.

The mental section of Hargesia Hospital, like the other hospitals, is deficient in basic amenities but is a part of a general hospital and has therefore a potential for becoming a model for a modern general hospital psychiatric unit.

There are five trained psychiatrists in the country. Four of them work in Forlinini Hospital in Mogadishu. There is no psychiatrist at Berbera mental hospital. Three psychiatric nurses have been trained but only one works for the Ministry of Health and even he has no clinical responsibility. There is no clinical psychologist or psychiatrist social worker in the country.

Except for the three hospitals mentioned above and the private practices set up by the psychiatrists working there, modern psychiatric care is non-existent elsewhere in the country. The major referral hospital (Digfer, Mogadishu), which has major specialities, including neurology and neurosurgery, has no psychiatric presence, even at outpatient level, and the services of the psychiatrists available in Mogadishu are not used, either at this hospital or other outpatient facilities in the capital. There is no tradition of liaison services in other facilities.

The whole structure of primary health care being set up in the country has no psychiatric input, though such input has been agreed in principle. Currently, the majority of the psychiatric patients are either unattended—living with their families—or receiving attention of the traditional healers. A local nongovernmental organization called the General Assistance and Volunteers Organization (GAVO) and an Italian nongovernmental organization called GRU-UNA are active in provision of mental health services.

The country has made an important advance by banning the use of *khat*, but there is a concern that there might be a growing misuse of other psychoactive substances such as alcohol, opiates, psychotropic drugs and tobacco. There is no provision for prevention and treatment of drug abuse in the country.

The knowledge and understanding of the general public regarding the causes and management of psychiatric disorders is rudimentary and in general, quite archaic and false. Most people believe mental illness to be due

to demons and spirits, and there is hardly any consolidated attempt at educating the public with the correct information and changing their attitudes.

Mental health training

Psychiatry is part of the medical curriculum at the University Medical School in Mogadishu. The teaching is, however, carried out by a visiting Italian psychiatrist who comes once a year for two to three months and imparts rudimentary theoretical knowledge. One of the Somali psychiatrists has a quasi involvement in the teaching programme, but his efforts are poorly coordinated with that of the visiting psychiatrist, and clinical training is inadequate. A rudimentary theoretical knowledge is imparted to nurses at the nursing school.

Against this background, in 1983 and 1986, WHO short-term consultants visited Somalia. They reviewed the situation and formulated a national mental health programme in consultation with the mental health professionals of Somalia.

Objectives of the national mental health programme

- To provide minimal mental health care for all, taking into account not only the treatment and prevention of mental disorders, but also the promotion of mental health.
- To provide mental health principles in other spheres of life in work, family interaction, community participation, for national growth and international participation.

Strategies for the proposed national mental health programme

Strategies for the proposed national mental health programme were to provide mental health care for all by integration of mental health into the general health programme, to provide graded training to various categories of workers at all these levels so that they can recognize mental disorders and epilepsy; encourage early rehabilitation of the mentally ill and epileptics; provide mental health education to the community; and refer all such cases that cannot be managed by them to regional hospitals.

Integration at the administrative level

Prior to the current years of unrest, it was planned to create a mental health unit in the Ministry of Health. A trained psychiatrist and work in the context of a national coordination committee will head this unit for mental health. The national mental health programme also envisaged activities in the areas of mental retardation, upgrading of mental hospitals, drug dependence care, involvement of nongovernmental organizations, nursing training and research. The civil strife and lack of resources have resulted in a lack of progress in any of the areas outlined above.

Recent developments

During 2004–2005, a major step was taken in improving the human resources for mental health care. A group of two dozen nurses and social workers were trained in essentials of psychiatry care at Bassao, Somalia over a period of 3 months. This was a residential training programme. The trainees were members of the different mental health care facilities, voluntary organizations. The 3-month training consisted of lectures, case demonstrations and clinical work at the psychiatric unit in the general hospital and active community level mental health activities. At the end of the training, each of the participants made a plan for organizing psychiatric care in their areas of work.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is a paucity of epidemiological data on mental illnesses in Somalia in internationally accessible literature. Elmi (1983) conducted an epidemiological research study on *khat* chewing in a random sample of about 7500 people. He suggested that the prevalence of the *khat* chewing has continuously increased in all social groups and that the excessive use of *khat* may create considerable problems of social, health and economic nature.

Mental health resources

Mental health policy

A mental health policy is absent. There is no unified health policy.

Substance abuse policy

A substance abuse policy is absent.

National mental health programme

A national mental health programme is absent.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is absent.

Mental health legislation

Details about the mental health legislation are not available.

Mental health financing

There are no budget allocations for mental health. Details about expenditure on mental health are not available. The primary source of mental health financing is grants. The financing of mental health services is almost entirely dependent on grants from WHO and nongovernmental organizations. The country does not have disability benefits for persons with mental disorders.

Mental health facilities

Mental health is not a part of the primary health care system. Actual treatment of severe mental disorders is not available at the primary level. Recently, a Mental Health Coordinator was appointed for North-West Somalia to initiate integration of mental health care into primary health care and training of primary health care personnel.

Regular training of primary care professionals is not carried out in the field of mental health. The voluntary workers of GAVO have been trained in the principles of psychiatric interview, introduced to DSM-IV, given training on psychopharmacology, psychosocial rehabilitation and hospital management. The training lasted for 2 years.

There are no community care facilities for patients with mental disorders. Limited community care through nongovernmental organizations and WHO are available in very limited areas of one region in northwest Somalia. A psychosocial centre was established in Berbera in 1990.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.398
Psychiatric beds in mental hospitals per 10 000 population	
Psychiatric beds in general hospitals per 10 000 population	
Psychiatric beds in other settings per 10 000 population	
Number of psychiatrists per 100 000 population	0.06
Number of neurosurgeons per 100 000 population	
Number of psychiatric nurses per 100 000 population	0.03
Number of neurologists per 100 000 population	
Number of psychologists per 100 000 population	0
Number of social workers per 100 000 population	0.19

There are only three centres for psychiatry, the mental hospital in Berbera and the general psychiatric wards in Hargesia and Mogadishu. Until the arrival of the nongovernmental organization from Italy, the condition of the mental hospital was appalling. Patients were kept in chains, and supply of food was largely dependent on charity. UNDP is supporting the psychiatric ward in Hargesia in terms of structural facilities and supplies. There is no private psychiatric inpatient facility though there are a few private clinics in Mogadishu and Hargesia. There is no specialized drug abuse treatment centre and there is no mental health training facility in the country. Only limited data about one area of Somalia, Somaliland is available. Psychiatrists have private clinics.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention, treatment and rehabilitation. The whole mental health set-up of Somalia is based on the efforts of nongovernmental organizations - GRT-UNA of Italy and General Assistance and Volunteer Association (GAVO), a local Somali nongovernmental organization. They help in the provision of services to mental patients and street children and provide training for primary health care personnel.

Information gathering system

There is no mental health reporting system in the country. The country has no data collection system or epidemiological study on mental health.

Programmes for special populations

No programmes for special population groups exist. UNDP and nongovernmental organizations are supporting the Government's plans for reintegration of the militia personnel including those that are mentally ill, into the mainstream through projects involving occupation.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: unknown.

Additional sources of information

Elmi AS. The chewing of *khat* in Somalia. *Journal of ethnopharmacology*, 1983, 8:163–176.

Mental health in Somaliland. (Government document).

Omar MA. Developments in mental health services in Somalia. *NIMHANS journal*, 1986, 4:131–132.

Sudan

Overview

With an area of 2 506 000 km², Sudan is the largest country in Africa. The heart of the country, in terms of population, lies at the confluence of the Blue and White Niles. The conurbation of the three towns, Khartoum, Khartoum North and Omdurman, is situated there and contains almost 20% of the population. The total population of Sudan is estimated to be 34.5 million (2004). The urban population is 36%. About 2.2 million are still entirely nomadic. There are about 19 major ethnic groups and a further 597 subgroups. Of the population 42% are below 15 years, and 4% are above the age of 65 years (2001). In 2000, the total adult literacy rate and the female adult literacy rate were estimated at 50% and 49%, respectively. The crude death rate is 11.5 per 1000 population and the crude birth rate is 37.8 per 1000 population (2004). The infant mortality rate is estimated at 68 per 1000 live births, and under-5 mortality rate 104 per 1000 live births. Total life expectancy at birth was 56.6 years in 2000. Maternal mortality ratio is estimated at 50.9 per 10 000 live births (2000).

The per capita gross national product in 2001 was US\$ 430. The per capita Ministry of Health expenditure was US\$ 8.7 in 2004. The Ministry of Health expenditure represented 2.4% of the country's budget. In 2003 there were 1.8, 0.07, 5.1 and 7.1 physicians, dentists, nurses/midwives and hospital beds per 10 000 of the population, respectively.

Health has been declared the first national priority after security. The health policies give priority to family health and reduction in morbidity and mortality rates among mothers and children; encourage community

involvement in the planning, implementation and supervision of the health services; reinforce primary health care and the delivery of its integrated components through the area health system; encourage scientific research into the more pressing health problems, including environmental pollution, endemic and epidemic diseases and malnutrition; seek improvement of the managerial skills of personnel at all levels; and emphasise coordination between health-related ministries and departments.

The design of the health care system in Sudan is based on primary health care and the “health area” concept, which is conceived as a decentralized health care system able to integrate, at district level, the existing vertical programmes, including preventive, curative and promotive activities. At village level, primary health care units represent the first level of contact between the community and the health services. Secondary health care is available in small towns through rural hospitals and urban health centres. Tertiary health care services comprise provincial, regional, university and specialist hospitals.

Committees for health have been established at both village and national levels. These committees are involved in planning, execution, resource finding and allocation as well as supervision of health services in their localities. The committees are supported by national laws and regulations and are effective, powerful bodies.

Nongovernmental organizations play a recognized role in the delivery of health care. The Ministry of Health has invited them to participate in planning sessions and meeting at national and local levels.

The health services suffer from acute shortages in trained personnel. There are no health human resources plans, and universities and other training institutions work in isolation from the Ministry of Health. Training and education are thus not directed toward meeting national needs.

Mental health

Historical aspects

Prior to the Second World War, there were hardly any organized psychiatric services for the care of mental patients. In the 1950s the Clinic for Nervous Disorders, Khartoum North, was established, and the Kober Institution was built to cater for 120 forensic psychiatric patients. This was

followed by the establishment of four psychiatric units in provincial capitals, at Wad Medani, Port Sudan, El Obeid and Atbara. In 1964, a 30-bed psychiatric ward was built in Khartoum General Hospital. Finally, in 1971, plans were laid to start work on Omdurman Psychiatric Hospital, the first of its kind in Sudan. The underlying policy was first to establish psychiatric units with close links with medical institutions and broad connections with community agencies. Other mental health developments include establishing a school for psychiatric medical assistants and organizing training courses for social workers and psychologists, for Sudan and other countries. Sudan was one of the countries selected to participate in a WHO project on strategies for extending mental health into primary health care, which paved the way for present day developments in the field of mental health in the region (1975–81).

The narcotics and substance abuse policy was formulated in 1995. Operationally, a national mental health programme formulated in 1986 and revised in 1998 includes short-term and long-term targets with emphasis on human resources development and extension of the mental health services to peripheral parts of the country. The guiding principles were close integration of essential mental health care with the general health system at the primary health care setting; development of training programmes for health personnel at all levels of the health service; development of an appropriate referral system with comprehensive recording of information; provision of essential drugs; and community involvement and close collaboration with other social sectors, agencies and organizations.

Progress

In 1990, a mental health unit in the Ministry of Health was established. There is now a mental health board, supported by the Sudanese Psychiatric Association, which acts as an advisory body to the Minister of Health. Integration of mental health services has occurred to an extent in the north of the country at the level of district general hospitals, and is being extended to the primary health care level. In existing mental health services, attention has been given to special groups such as migrants, vagrants, the elderly, refugees and the displaced, and street children. School mental health has been introduced into the mental health programme. A list of essential

drugs, which contains neuropsychiatric drugs at different levels, has been formulated while the policy has been operational since 1970.

A four-year postgraduate course leading to an MD in psychological medicine was initiated in 1989. Training courses are also available for medical officers and other health care staff. Forty-eight doctors who work at primary health care level have been trained in mental health for two weeks, and a one-week course was held for police and prison officers. The medical curriculum now incorporates community psychiatry at the University of Al Gezira. Four psychologists and four social workers have undergone postgraduate training. Intensive community involvement includes use of the mosque and input from religious healers as well as the Sudanese National Society for Mental Health and the Sudanese Institute of Traditional Medicine.

Substance dependence represents a serious problem. Measures to combat this are directed by the multidisciplinary Sudanese National Narcotic Control Board, with support from WHO.

Legislation

Mental health legislation forms a chapter of the Public Health Act of 1973. This was reviewed by the Sudanese Psychiatric Association in 1985. A mental health law was enacted in 1998.

Recent developments

Sudan was a pioneer country in mental health services during the 1970s. Some innovative approaches, like starting of general hospital psychiatric units and integration of mental health with primary health care, were introduced during this period, earlier than other countries of the Region. However, currently, mental health services are inadequate. The national mental health programme was first formulated in 1986 and revised in 1998.

There were four developments in the past years. First, there is evidence of high mental health morbidity among the internally displaced population in Darfur region. Second, the Gezira mental health project has demonstrated both the feasibility and the effectiveness of the integration of mental health with general health care. Third, a number of psychosocial interventions have been developed to address the needs of traumatized

populations. Fourth, efforts have been directed to develop a national mental health policy and a strategic 6-year mental health plan of action.

El-Ghaili et al (2002) reported on the impact of the community-based mental health services. The Gezira Mental Health Programme represents a collaborative work involving the university, the community and the government. Its aims were to modify community concepts, attitudes and practices concerning mental health; to ensure community involvement and participation; to extend mental health services; to train primary health care staff; and to encourage research. The programme was implemented in three phases: preparatory, implementation, and evaluation. In the evaluation of the impact of the programme on changing community attitudes, on training of staff, on extension of mental health services and on research, qualitative assessment, through interviews, focus group discussion, supervision visits and review of reports were used. There was overall agreement that the programme helped in raising public awareness regarding the concept of mental health, the care of the mentally ill and community participation. Members of the health team who received training as part of the programme reported a better understanding of mental health problems and an improvement in their handling of the mentally disturbed patients. Teachers reported an increased awareness of mental health problems in schoolchildren and a better collaboration with those involved in the handling of such problems. Social workers and psychologists updated their knowledge and skills and were well prepared to participate in the programme. Members of the different sectors involved reported a better standard of collaboration regarding mental health activities. These findings indicate that this programme, by providing a new model for health services in this field, has induced a large policy change within Sudan. The community-based activities have resulted in a major change in the delivery of mental health services in Gezira State. The programme has resulted in a major shift in mental health services being provided by central hospitals to PHC settings. In addition it stimulated research, thereby providing much original information that will help in preparing for future plans.

Summary update (*Mental health atlas*, 2005)

Epidemiology

Rahim and Cederblad (1989) evaluated a sample of 204 subjects aged 22–35 years using the Self-Rating Questionnaire, the Eysenck Personality Inventory and a Sudanese rating scale of anxiety and depression, a psychiatric interview and a medical examination. Results showed that 16.6% of the subjects had at least one disorder as per DSM-III. The most common were depression (8.4%) and generalized anxiety (3.4%). Alcohol abuse was rare (0.4%). There was no sex difference in the prevalence of mental disorders. Cederblad and Rahim (1989) re-interviewed 104 randomly chosen subjects in 1983 (from the original pool of 197 children examined in 1964–1965). The overall psychiatric impairment was 14% (males 18%; females 8%). In an earlier study they evaluated the psychological effect of urbanization on children aged 3–15 years living in a sub-urban community that transformed from a rural to urban economy between 1965 and 1980. Interviews done in 1965 and 1980 showed an increase in behaviour problems in boys aged 7–15, while there was an improvement in physical health and nutrition. Behaviour problems were associated with factors related to parents (blue-collar workers, maternal anxiety/depression, harsh corporal punishment) and children (dropping out of school, poor somatic health) (Rahim & Cederblad, 1986). Cederblad (1988) assessed behaviour disorders in children of different ages in Sweden, Sudan and Nigeria. The similarities of frequencies of behaviourally disturbed children were more striking than the differences. Rural children generally had less behaviour problems than urban ones. However, in another multi-country study, carried out in a primary care setting ($n = 925$), that employed a two-stage screening process, Giel et al (1981) found the prevalence of mental disorders among children to range from 12% to 29%. Rahim and Cederblad (1986) and Cederblad et al (1986) evaluated the prevalence of enuresis in 8462 children aged 3–15 living in the suburban area. 88% wetted their beds at least several times per week. The prevalence of enuresis was higher in boys than in girls. Only 5% of the children above 7 years of age had secondary enuresis. An intensive study of 245 children selected through stratified sampling did not reveal any association between enuresis and somatic, developmental, behavioural, socio-economic or child rearing (including bladder-training) factors.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1998. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1995.

National mental health programme

A national mental health programme is present. The programme was formulated in 1998. The national mental health programme aims to integrate with general health facilities along with promotion of comprehensive mental health care, train mental health personnel and establish a national organizational body for systematic coordination of related activities and the promotion of mental health.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1970.

Mental health legislation

The most recent legislation is the state law, Gezira Mental Health Law of 1998. The mental health legislation forms chapter of the Public Health Act of 1973, which was revised in 1985. The Mental Health Act has been drafted and has gone to the parliament for approval. The latest legislation was enacted in 1998.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary source of mental health financing is tax-based. The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is not a part of primary health care system. Actual treatment of severe mental disorders is not available at the primary level.

Mental health has not been integrated with the primary care, and there is also a lack of personnel.

Regular training of primary care professionals is carried out in the field of mental health. In the last two years, about 40 personnel were provided training. Training facilities are present for primary care physicians, police and prison officers. The Gezira Mental Health Programme was aimed at modifying community concepts, attitudes and practices concerning mental health, ensuring community involvement and participation and extending mental health services by training primary health care staff. The evaluation of the programme showed that it helped in raising public awareness and community participation. Members of the health team and teachers who received training reported a better understanding of mental health problems and an improvement in their handling of the mental problems. Sudan has the experience of using traditional healers for provision of mental health services.

There are no community care facilities for patients with mental disorders. Community care is absent due to the lack of proper transportation, lack of social workers and poor health education.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.2
Psychiatric beds in mental hospitals per 10 000 population	0.18
Psychiatric beds in general hospitals per 10 000 population	0.02
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	0.09
Number of neurosurgeons per 100 000 population	0.007
Number of psychiatric nurses per 100 000 population	0.2
Number of neurologists per 100 000 population	0.014
Number of psychologists per 100 000 population	0.17
Number of social workers per 100 000 population	0.1

Many mental health professionals including most psychiatrists have left for other countries.

Nongovernmental organizations

Nongovernmental organizations are not involved with mental health in the country. Special attention has been given to migrants, elderly, refugees, displaced and homeless and children.

Information gathering system

There is no mental health reporting system in the country. Some mental health information particularly numbers related to admissions for major disorders are collected from a few hospitals in the general health data collection system, but the system has many limitations.

The country has no data collection system or epidemiological study on mental health. There are no funds or personnel to carry out epidemiological studies.

Programmes for special populations

These groups are supported by nongovernmental organizations and UNICEF. A school mental health programme is present.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: phenobarbital, phenytoin sodium. Since mental health is not integrated in primary care level, most of the drugs are not available at primary care level. A list of essential neuropsychiatric drugs for all levels has been formulated.

Additional sources of information

Cederblad M. Behavioural disorders in children from different cultures. *Acta psychiatrica Scandinavica, supplementum*, 1988, 344:85–92.

Cederblad M, Rahim SI. Epidemiology of nocturnal enuresis in a part of Khartoum, Sudan. II. The intensive study. *Acta paediatrica Scandinavica*, 1986, 75:1021–1027.

Cederblad M, Rahim SI. A longitudinal study of mental health problems in a suburban population in Sudan. *Acta psychiatrica Scandinavica*, 1989, 79:537–543.

El Gaili DE, Magzoub M, Schmidt HG. The impact of a community-oriented medical school on mental health services. *Education for health*, 2002, 15:149–157.

Giel R, de Arango MV, Climent CE et al. Childhood mental disorders in primary health care: results of observations in four developing countries. A report from the WHO collaborative study on strategies for extending mental health care, *Pediatrics*, 1981, 68:677–683.

Mohit A. Mental health and psychiatry in the Middle East: historical development. *Eastern Mediterranean health journal*, 2001, 7:336–347.

Rahim SI, Cederblad M. Epidemiology of nocturnal enuresis in a part of Khartoum, Sudan. I. The extensive study. *Acta paediatrica Scandinavica*, 1986, 75:1017–1020.

Rahim SI, Cederblad M. Effects of rapid urbanization on child behaviour and health in a part of Khartoum, Sudan--II. Psycho-social influences on behaviour. *Social science and medicine*, 1986, 22:723–730.

Rahim SI, Cederblad M. Epidemiology of mental disorders in young adults of a newly urbanized area in Khartoum, Sudan. *British journal of psychiatry*, 1989, 155:44–47.

El-Ghaili DE, Magzoub MM, Schmidt HG. The impact of a community-oriented medical school on mental health services, *Education for health*, 2002, 15:149–57.

Shaaban KM, Baashar TA. A community study of depression in adolescent girls: prevalence and its relation to age, *Medical principles and practice*, 2003, 12:256–9.

Bolea PS, Grant G Jr, Burgess M, Plasa O. Trauma of children of the Sudan: a constructivist exploration, *Child welfare*, 2003, 82:219–33.

Karunakara UK, et al. Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandans in the West Nile, *African health sciences*, 2004, 4:83–93.

Neuner F, et al. A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement, *Journal of consulting and clinical psychology*, 2004, 72:579–87.

Eisenbruch M, de Jong JT, van de Put W. Bringing order out of chaos: a culturally competent approach to managing the problems of refugees and victims of organized violence, *Journal of trauma stress*, 2004, 17:123–31.

Goodman JH. Coping with trauma and hardship among unaccompanied refugee youths from Sudan, *Qualitative health research*, 2004, 14:1177–96.

Lustig SL, Weine SM, Saxe GN, Beardslee WR Testimonial psychotherapy for adolescent refugees: a case series, *Transcultural psychiatry*, 2004, 41:31–45.

Coker EM Traveling pains: embodied metaphors of suffering among Southern Sudanese refugees in Cairo, *Culture, medicine and psychiatry*, 2004, 28:15–39.

Coker, EM. Dislocated identity and the fragmented body: discourses of resistance among Southern Sudanese refugees in Cairo, *Journal of refugee studies*, 2004b 17:

Awadalla AW et al. Subjective quality of life of family caregivers of community living Sudanese psychiatric patients. *Social psychiatry and psychiatric epidemiology*, 2005, 40: 755–763.

Awadalla AW et al. Subjective quality of life of community living Sudanese psychiatric patients: comparison with family caregivers' impressions and control group, *Qualitative life research*, 2005, 14:1855–67.

Geltman PL et al. The “lost boys of Sudan”: functional and behavioral health of unaccompanied refugee minors re-settled in the United States, *Archives of pediatric adolescent medicine*, 2005, 159:585–91.

International Medical Corps. Basic needs, mental health, women's health among the internally displaced persons in Nyala District, South Darfur, Sudan. www.imcworldwide.org, 2005.

Syrian Arab Republic

Overview

The Syrian Arab Republic has a total area of 185 180 km² of which approximately 80 000 km² is cultivable land; the remainder is desert and barren mountains. The country's population is estimated at 18.2 million (2004). The population growth rate is 2.5% (2003); 40.2% of the population is below 15 years while 3.6% of the population is above 65 years of age (2002), 50% of whom are living in urban areas. The total adult literacy rate and the adult female literacy rates are estimated at 86% and 78%, respectively (2003). In 2002, the crude death rate was estimated to be 4.9 per 1000 population, and the crude birth rate 30 per 1000 population. The infant mortality rate is 18.1 per 1000 live births, under-5 mortality rate 20.2 per 1000 live births, maternal mortality ratio 6.5 per 10 000 live births and total life expectancy at birth 71.5 years (2003).

The per capita gross national product in 2003 was US\$ 1150. In 2002, 3.8% of government budget was given to ministry of health, comprising 1.5% of the gross national product. The per capita Ministry of Health expenditure, in 2002, US\$ 18.6. As regards human and material resources the overall rates per 10 000 population of physicians, dentists, nursing/midwifery personnel and hospital beds are 14.3, 8.7, 18.8 and 14.9, respectively (2003).

Within the framework of national development, the health objectives are to increase the quantity and quality of health services provided, achieve more equitable coverage of health services between urban and rural areas, decrease morbidity and mortality due to infectious diseases and

environmental pollution, and decrease the infant mortality rate to the lowest possible, use existing resources more efficiently by improving performance of health human resources and updating equipment as well as improving management, increasing availability of drugs and concentrating on local manufacture of essential drugs.

The health system is based on primary health care and is delivered at three levels: village, district and provincial. At village level, there are rural health centres and health units. At district level, there are larger health centres including training facilities and specialized physicians. District health centres are staffed with at least one physician, one nurse, and one public health technician. Some larger centres are additionally staffed with dentists, paediatricians, obstetricians, pharmacy technicians, laboratory technicians, midwives and health visitors. On average, there are 9.8 health workers per district health centre. A small district general hospital also exists in each district. The health centres belonging to each of the country's 14 provinces report to one main health centre. Each is allocated its own budget, and each director of health is given authority and flexibility to implement programmes within the present development strategy

At provincial level, there are urban health centres staffed with specialized physicians and dentists in addition to various technicians. Among the services provided in health centres are immunization, maternal and child health, family planning, control and prevention of communicable diseases, environmental control, preventive care for chronic noncommunicable diseases, and health education. At the provincial level, there are also large general hospitals and specialized hospitals. At the national level, there is a network of ambulance, blood bank and drug distribution services.

Mental health

Background and developments

The project profile for the national mental health programme was prepared by WHO and a national committee in Damascus in November 1987 (it was submitted for approval in 2001). The objectives were to extend mental health services throughout the country at the primary health care level, in full coordination with the general health system; to provide training to basic and auxiliary medical cadres in order to equip them with the

necessary information and suitable skills in the field of mental health care; to strengthen specialized mental health services, and to promote mental health education in the community and stimulate community participation, so as to achieve the objectives of the national mental health programme.

Under the overall general objective, the services objectives included establishment of four treatment units in the four provinces where such services were not available; establishment of four psychiatric outpatient clinics in four selected hospitals; establishment of a referral system to specialized hospitals from these centres; preparation of an information system; preparation of a list of essential neuropsychiatric drugs; and preparation of a manual on mental health services in the country.

A national committee was formed to review mental health services. The committee was chaired by the director of the national mental health programme, and had as members psychiatrists working in the mental health sector, such as the director of Ibn Sina Hospital; the head of the Department of Psychiatry, University of Damascus; the head of the Department of Psychiatry, Military Medical Services; and a representative from the Ministry of Work and Social Affairs (Social Insurance Foundation). A Mental Health Department was established in Ministry of Health and within the framework of the sixth five-year plan, ending in 1990, was the allotment of a special budget for restructuring of mental health services—initiation of psychosocial clinics in Damascus and Aleppo in order to serve as centres for mental health studies; incorporation of psychiatric clinics within polyclinics, and ensuring the availability of at least one such clinic in each province; initiation of two centres for the treatment of addiction in Damascus and Aleppo; and initiation of intensive courses in the field of psychiatry in Damascus and Aleppo for qualifying general practitioners and nurses.

Legislation

The rules governing mental health and psychiatric treatment in the Syrian Arab Republic are derived from the health legislation issued in 1981 by the Ministry of Health. The essential drugs policy was formulated in 1990.

Mental health facilities

There are 800 beds at Ibn Sina Psychiatric Hospital in Damascus distributed over 18 wards, allotted for the treatment of 600 male patients and 200 female patients—of whom 100 are under legal confinement. Treatment of such patients is mainly conducted through the use of psychoactive drugs and rehabilitation through work and other social and artistic activities.

Ibn Khaldoun Psychiatric Hospital, in Aleppo, has 400 beds, 250 of which are for male patients and 150 for female patients, receiving more or less the same type of medical treatment used at Ibn Sina Hospital in Damascus.

In addition a psychiatric department providing therapeutic psychiatric services at the Ministry of Health Hospital of Ibn Al-Nafees; a teaching psychiatric department which provides similar services at Al-Moassat Hospital of Damascus University; as well as two more mental health departments providing such services at two military hospitals affiliated to military medical services are operating in Damascus.

In addition to these hospitals, there are special foundations attached to the Ministry of Work and Social Affairs, which provide treatment and rehabilitation to the mentally handicapped and delinquents, under the supervision of licensed psychiatrists. Over 60 primary care personnel have been trained in mental health.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is a paucity of epidemiological data on mental illnesses in Syrian Arab Republic in internationally accessible literature. Maziak et al (2002) recruited a sample of 412 women from 8 randomly selected primary care centres in one area. A special questionnaire was prepared for the study purpose consisting of SRQ-20 non-psychotic items and questions about background information considered relevant to the mental health of women in the studied population. Direct individual interviews were also conducted. The prevalence of psychiatric distress was 55.6%. The following factors were found to predict women's mental health on logistic regression: physical abuse, education (illiteracy), polygamy, residence, age and age of marriage. Among those predictors, women's illiteracy, polygamy and physical abuse

were the strongest determinants of mental distress leading to the worse outcomes.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 2001.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1993.

National mental health programme

A national mental health programme is present. The programme was formulated in 2001.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1990.

Mental health legislation

The legislation concerns the organizing the admission and discharge of patients in government psychiatric hospitals. The latest legislation was enacted in 1965.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. Details about sources of financing are not available. The country has disability benefits for persons with mental disorders.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level.

Regular training of primary care professionals is carried out in the field of mental health. About 110 nurses and general physicians have been trained in the last 10 years.

There are no community care facilities for patients with mental disorders.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	0.8
Psychiatric beds in mental hospitals per 10 000 population	0.78
Psychiatric beds in general hospitals per 10 000 population	0.02
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	0.5
Number of neurosurgeons per 100 000 population	0.6
Number of psychiatric nurses per 100 000 population	0.5
Number of neurologists per 100 000 population	0.9
Number of psychologists per 100 000 population	0
Number of social workers per 100 000 population	0

Beds have been earmarked for female patients. Forensic beds are available.

Nongovernmental organizations

Nongovernmental organizations are not involved with mental health in the country.

Information gathering system

There is no mental health reporting system in the country. Only statistical admission data of psychiatric hospitals are reported. The country has no data collection system or epidemiological study on mental health.

Programmes for special populations

The country has specific programmes for mental health for refugees and elderly. Services for mentally retarded are available.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, carbidopa, levodopa.

Additional sources of information

Maziak W et al. Sociodemographic correlates of psychiatric morbidity among low-income women in Aleppo, Syrian Arab Republic. *Social science and medicine*, 2002, 54:1419–1427.

Tunisia

Overview

Tunisia has a land area of 154 630 km². It has a population of 9.91 million (2004), 65% of whom are resident in urban areas. The Tunisian population is young, 26.7% being under 15 while those over 65 years of age represent only 6.8% of the population (2002). In 2003, the total adult literacy rate and the adult female literacy rates were estimated at 78% and 69%, respectively. The infant mortality rate was estimated at 22.8 per 1000 live births in 2001. In 1999, the under-5 mortality rate was estimated at 24.2 per 1000 live births and the maternal mortality ratio 4.5 per 10 000 live births. In 2002, the total life expectancy at birth was estimated at 73 years of age. The crude birth rate was 16.7 per 1000 population in 2002.

Administratively, the country is divided into 23 governorates, which are further subdivided into districts (délégations) and subdistricts. The gross national product per capita was US\$ 2161 in 2004. The Ministry of Public Health budget was 8.3% of the total budget comprising 2.0% of the gross national product. The per capita expenditure on health was US\$ 119, while the Ministry of Public Health spent US\$ 67.(2002) In 2003 there were 9 physicians, 1.67 dentists, 36.4 nurses/midwives and 20.5 hospital beds per 10 000 of the population.

The health infrastructure can be divided into three main sectors: the public, the social security and the private sectors. The greater part of the population is served by the public sector. The services of government departments, such as the army, the police and the Ministry of Education are responsible for relatively limited populations.

Since 1990, the pyramid of health infrastructure has had four levels in the governorates: an extensive network of 1471 basic health centres (including maternal and child health centres, dispensaries and health posts) forms its base. At the secondary level are the 102 district hospitals, which provide primary health care and maternity and general inpatient and outpatient care. These two levels of the public health pyramid cover most of the health needs of the local communities. The third level—second-referral level—is made up of 23 regional hospitals. At the top of the pyramid are 12 teaching hospitals, nine specialized institutes and 15 national specialized centres.

Community involvement in the field of health is carried out within the framework of local health councils (or committees) in each health district. Chaired and organized by the local political and administrative authority, these councils comprise locally elected representatives as well as the officers in charge of health-related sectors. It is also quite common that the community intervenes more directly in setting up a health centre managed directly by the people, in organizing health education, hygiene and first aid campaigns with nongovernmental organizations (for example, the Tunisian Youth Organization, the Red Crescent Society and the Tunisian Organization for Road Safety).

Mental health

Mental health facilities

The mental health facilities and human resources are largely centralized and institution-based in Tunisia. There is a concentration of psychiatrists in the capital city, which has about two-thirds of the specialists.

Mental health infrastructure

The chief components of mental health care are the psychiatric hospitals. The total number of psychiatric beds in the country is 902. These are distributed as follows:

Razi Hospital: 640 beds

Military Hospital, Tunis: 48 beds

Fattima Bourghiba Hospital, Monastir: 25 beds

Aedi Shaker Hospital, Sfax: 189 beds

There is a total lack of facilities in the interior of the country, particularly in the governorates of the west, the centre and the north, except in Kairouan, where there is one psychiatrist to provide services for a population of 450 000.

Specialized health care for children and adolescents are almost non-existent, with the exception of the day hospital of Habib Thameur, in Tunis, the consultancy in Sfax, at Monastir Hospital, and the school centres in Tunis and Sousse.

There are other institutions in which mentally ill persons are housed and receive care. These institutions include asylums for the elderly (under the auspices of the Ministry of Social Welfare), homes for the handicapped without families, private hospitals and traditional healers' wards that use traditional methods in the setting of modern facilities. There are also nongovernmental organizations which participate in the care of the mentally ill and for the retarded (e.g. the League for the Care of the Mentally Retarded).

Mental health human resources

There are 81 psychiatrists in the country. Of these, 19 are in the public psychiatric institutions, 20 in academic departments and 42 in private sectors. There are 10 psychologists in the country and no social workers. There are 310 nurses working in psychiatric institutions, of whom 40 have received specialized training in psychiatry.

There are four medical colleges, and the undergraduate medical students receive limited training in mental health amounting to 28 hours.

National mental health programme

The draft programme was developed in 1990 against a background of rapid social change and urbanization with a resultant greater recognition of the need for mental health care for the general population. The focus of the national mental health programme is to provide appropriate care for psychiatric patients and to prevent mental disorders, especially those caused as a result of industrialization and modernization. The programme aims at integration of mental health with general health and primary health care,

intersectoral coordination, training of personnel and information, education and communication to the general population.

A ministerial decree issued in May 1992 established a technical committee for mental health. The committee consists of leading psychiatrists and representatives of other ministries. There are five subcommittees: on training, on health education and information, on the treatment of the mentally ill and care for groups at high risk, on judicial issues, and for coordination among social sectors.

The subcommittees have initiated several activities, such as training of personnel, preparation of a manual for physicians at the primary health care level, visits of specialists to outpatient departments on a periodic basis, review of the drug lists at the primary health care level, radio and television programmes and research. The narcotics/substance abuse policy was formulated in 2000 and the essential drugs policy has been in place since 1979.

Community mental health programmes

There is very good primary health care in the country. However no systematic effort to integrate mental health care with primary health care has been made. The activities carried out include the preparation of a doctor's manual and training of 60 health workers, 120 nurses and about 500 general physicians. Over 280 personnel have been trained in mental health.

The school health programme in the country is very well developed, consisting of about 500 public health physicians and 700 nurses. Currently, only one centre carries out mental health work.

Research

Currently, a general population epidemiological survey of depression and schizophrenia in the Ariana area is in progress. Similarly, other studies about the prevalence of mental illness in homes for the elderly and in the divorced have been completed.

Summary update (*Mental health atlas*, 2005)

Epidemiology

A community epidemiological study carried out on a representative sample of 5000 adults in one region reported a life time prevalence of about 9% for major depression and 0.6% for schizophrenia (Hachmi et al, 1995). Fakhfakh et al (2000) assessed the use of tobacco (smoking) in Tunisia since 1970 using different sources. Cigarette smoking increased from 1981 to 1993 but decreased slightly after that. The prevalence of current tobacco smoking was 30.4% (52% for males and 6% for females). In young people, the prevalence was 29.2% (50% for males and 3.9% for females). Young people who attended school smoked less than those who did not (18.1% versus 38.4%). Most started smoking between 14 years and 18 years. Gassab et al (2002) conducted a retrospective study of depression in a clinical sample ($n = 155$) of bipolar ($n = 86$) and recurrent depressive disorder ($n = 59$) patients, diagnosed according to the DSM-IV criteria. The following factors were correlated with bipolarity: separation/divorce, family history of psychiatric disorders (especially bipolar disorders), early onset, number of affective episodes, sudden onset of depressive episodes and psychotic features, catatonic features, hypersomnia and psychomotor inhibition. Somatic comorbidity (diabetes, hypertension, rheumatic diseases) and dysthymic disorders were predictors of non-bipolar depression. The bipolar family history criterion had the highest positive predictive validity, while the psychotic characteristics criterion had the lowest positive predictive validity. Moalla et al (2001) found that organic (somatic illnesses, epilepsy) and environmental (parental quarrels, poor family support) factors were associated with onset of mental disorders in a sample of more than 1400 child psychiatry out-patients. Ayadi et al (2002) found divorce to be associated with mental disorders in children (personality disorders, functional disturbance and depressive disturbance). Karoui and Karoui (1993) compared children with pica with children without pica in a day care centre and found that pica was associated with gender (male), family history of pica (positive in 57% of the cases), socioeconomic status (low) and locality (urban). The onset was between 12 and 18 months in most cases. Children of divorced parents had worse short- and medium-term outcomes in

comparison to children of parents who were staying together, but the long-term outcome was similar.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1986. The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation. There are committees and sub-committees looking into the training of personnel, preparation of manuals for physicians at the primary care level, visits of specialists to outpatient departments on a periodic basis, review of drug list, radio and television programmes and research. The main thrust of the policy are integration of mental health into primary care, training of non-psychiatric medical professionals in psychiatric care, creation of psychiatric services in general hospitals and sectorization of services.

Substance abuse policy

A substance abuse policy is present. The policy was initially formulated in 1969. The substance abuse policy was revised in 1969 and 2000.

National mental health programme

A national mental health programme is present. The programme was formulated in 1990. The goals of the programme are to promote and protect mental health and to prevent, detect and treat mental disorders.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1979. The national therapeutic drug policy/essential drugs list was re-evaluated in 1993 and in 2000.

Mental health legislation

Law No. 92-83 of 1992 on mental health and conditions of hospitalization of individuals with mental disorders was the first law in the field of mental health. The latest legislation was enacted in 2003.

Mental health financing

There are no budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are tax-based, out-of-pocket expenditure by the patient or family, private insurances and social insurance.

The country has disability benefits for persons with mental disorders. Mental health patients are provided financial, treatment and transportation benefits.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. The general practitioners diagnose severe disorders and refer patients almost systematically to the second/third level of care (a second level of care is only available in a few regions) for treatment and monitoring.

Regular training of primary care professionals is carried out in the field of mental health. In the last two years, about 280 personnel were trained. Although training has been provided to some primary care personnel, a system of follow-up has not been developed yet. A manual for training of physicians has been prepared.

There are community care facilities for patients with mental disorders. Some nongovernmental organizations provide community-based care for children under the aegis of the Social Affairs Ministry.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.13
Psychiatric beds in mental hospitals per 10 000 population	0.85
Psychiatric beds in general hospitals per 10 000 population	0.27
Psychiatric beds in other settings per 10 000 population	0
Number of psychiatrists per 100 000 population	1.6
Number of neurosurgeons per 100 000 population	0.2
Number of psychiatric nurses per 100 000 population	0.2
Number of neurologists per 100 000 population	0.4
Number of psychologists per 100 000 population	0.6
Number of social workers per 100 000 population	

Two thirds of the specialists are based in the capital and along the coastline.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in promotion, prevention and rehabilitation. Some nongovernmental organizations are involved in the care and training of the mentally retarded children.

Information gathering system

There is no mental health reporting system in the country. Preparations are going on to include some indicators in the annual health reporting system.

Programmes for special populations

The country has specific programmes for mental health for indigenous population, elderly and children. There are services for delinquents, abandoned children, prostitutes and patients affected by HIV.

There are some facilities for children and adolescents in the form of day care hospitals, consultancy clinics and medico-school centres. There is also a school health programme. There are homes for the elderly and mentally retarded individuals.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, sodium valproate, amitriptyline, chlorpromazine, diazepam, fluphenazine, haloperidol, lithium. Drugs like cloimipramine form a part of the essential drug list.

Other information

Additional sources of information

Ayadi H et al. Parental divorce and psychopathologic unrests at the child and the teenager. Tunisian comparative study. *Neuropsychiatrie de l'enfance et de l'adolescence*, 2002, 50:121–127.

Fakhfakh R et al. Trends in tobacco consumption in Tunisia. *Eastern Mediterranean health journal*, 2000, 6:678–686.

Gassab L, Mechri A, Gaha L et al. Bipolarity correlated factors in major depression: about 155 Tunisian inpatients. *Encephale*, 2002, 28:283–289.

Karoui A, Karoui H. Pica in Tunisian children. Results of a survey performed in a polyclinic of the Tunisian social security national administration. *Pediatric*, 1993, 48:565–569.

Moalla Y, Ayedi H, Laaribi H et al What etiologic factors at the Tunisian children? Timely an epidemiologic investigation. *Neuropsychiatrie de l'enfance et de l'adolescence*, 2001, 49:343–351.

Hachmi et al. Epidémiologie des troubles dépressifs et de la schizophrénie dans le gouvernorat de l'ARIANA. *Mémoire de psychiatrie*. Library of the Faculty of Medicine of Tunis: Srairi LYES, 1995.

Republique Tunisienne Ministère de la santé. Programme National de Santé Mentale, 1998.

United Arab Emirates

Overview

There are seven member states of the United Arab Emirates: Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al-Quwain, Ras Al-Khaimah and Fujairah. They lie mostly on the southern shore of the Persian Gulf but also extend to the Gulf of Oman shore. The total area of this seven-state federation is 83 600 km². The Emirates' population is dominated by expatriate males as a result of a massive influx of immigrant workers after the oil boom.

The political commitment to national health and the right of all citizens and residents to comprehensive health care is strongly confirmed by the constitution of the country, which dictates that health services are to be provided to all the people free of charge. The strategies of the Ministry of Health for the promotion and development of the health of the people in the United Arab Emirates are well defined and explained in three national documents published in 1986, the national five-year development plan for the United Arab Emirates (1986–1990), the health strategy to attain the goal of health for all by the year 2000, and *Primary health care in the United Arab Emirates (1986–1990)*.

The third five-year development plan (1986-90) provides broad objectives and guidelines to translate primary health care policy into strategies for implementation as detailed in the document. The priority areas defined by the strategy are as follows: control and prevention of childhood communicable diseases, control and prevention of tuberculosis control and prevention of diarrhoeal diseases control of diseases related to pregnancy,

malaria control, control of accidents and their complications, care of diabetics care of hypertensive patients, care of cancer patients, prevention of AIDS, control of parasitic intestinal diseases, strengthening of occupational health development of health human resources, and development of health systems.

The population was 4.21 million in 2004 of which about 61% were male. Of the population aged 15 years and over, 66% are male. In 2002, the populations below 15 years of age and above 65 years of age were estimated to be 25.5% and 1.0% respectively. In 2002, the total adult literacy rate and the adult female literacy rate were estimated to be 86% and 91% respectively. Unofficial estimates suggest that non-national respectively. Unofficial estimates suggest that non-nationals may account for some 70% of the total population. The per capita gross national product in 2001 was US\$ 256 141.

The crude birth rate was 15.5 per 1000 population in 2002, the infant mortality rate was estimated at 8.1 per 1000 live births and the under-5 mortality rate 10.2 per 1000 live births. Also in 2002, the maternal mortality ratio was 0 per 10 000 live births. The total life expectancy at birth was estimated to be 72.6 years of age in 2002. The rates for physicians, dentists, nurses/midwives and hospital beds per 10 000 population are 16.9, 2.9, 35.2 and 21.9, respectively (2002).

Mental health

During the past 25 years, the United Arab Emirates has seen rapid developments in all spheres of life, including health services. The effort has been to provide modern health services for all the population. However, the general development of hospital services has not included adequate provisions for psychiatric care. During the past 15 years, a national mental health programme was formulated and initiatives made to implement the same. Practically, out of the 15 objectives set out in the national mental health programme in 1991, 90% has been implemented and the rest of the objectives remain under way.

Abu Dhabi psychiatric hospital

Introduction

The psychiatric hospital in Abu Dhabi was built on instructions of the President, His Highness Sheikh Zayed Bin Sultan Al Nahayan, in 1985 following a heroin epidemic in the area and followed by the establishment of federal law No.6 on control of narcotic and like substances (1986). The hospital opened in 1995.

The hospital is located within a medical city. Psychiatric patients can use all the ancillary services within the medical city (such as radiology and laboratory services), thus giving patients and their families the motivation for treatment, hope for socialization and the sense of belonging to the community.

The psychiatric hospital functions as a national resource centre for clinical work, teaching and research, with special emphasis on the integration of mental health services with other health services and multidisciplinary practice and teaching. This promotes liaison psychiatry-cooperation between general medical departments and the hospital. The hospital has formal academic links with the Department of Psychiatry and Behavioral Sciences of the Faculty of Medicine and Health Services at United Arab Emirates University in Al-Ain with full commitment to multidisciplinary teaching aimed at improving the standard of mental health care in all the emirates. Teaching programmes are provided for undergraduates and postgraduates, nurses, social workers, psychologists and technical staff. Also, the hospital offers scientific lectures for medical staff and regular lectures for patients' relatives in the day centre and hosts scientific meetings such as those held by the psychiatric division of the Emirates Medical Association.

A central psychiatric register has been established by the Ministry of Health for collection of data and research statistics regarding mental health service. This system is being currently installed into the psychiatric hospital in Abu Dhabi. Data from all emirates, regional and international centers would be pooled into this information system.

The hospital is intended to be the leading model for a modern community-based acute psychiatric unit within the Gulf Cooperation Council states and is the equal of many units in developed countries.

A manual defining the operational strategy of the agreed policies, procedures and guidelines is available containing: policies for different disciplines-doctors, clinical psychologists, social workers, occupational therapists and nursing specialists; and job descriptions for all specialties.

The hospital contains adult general unit, psychiatric intensive unit, day treatment centre, chemical dependency unit, rehabilitation unit, child and adolescent unit. Liaison and community psychiatry unit and teaching centres.

There are at present six consultants with internationally recognized qualifications, six senior registers (specialist grade), 10 general practitioners with three psychiatric qualifications, 15 social workers, 14 clinical psychologists (three PhD Psych), seven occupational therapists (only one with a recognized qualification) and 134 nurses.

Al-Ain

Following an accident that led to the demolition of the 30 bedded unit housing the psychiatric patients, there is now a psychiatric unit in the General Hospital with two consultants and hospital registers. Another consultant psychiatrist will join the group soon. This unit is run jointly by the medical staff of the Department of Psychiatry and Behavioural Sciences of the Faculty of Medicine and Health Services at United Arab Emirates University in Al-Ain.

There is a psychiatry unit in Tawam General Hospital with a consultant psychiatrist, who runs an emergency outpatient clinic as well. Another psychiatrist will be appointed soon.

Dubai

Al Amal Hospital is a purpose-built psychiatric hospital built in 1981 isolated from the main hospital complex. Because of shortage of staff, only 50 beds are being used for acute general psychiatry and drug-dependent persons. There is only one consultant, specialist and several psychologist and social workers. Currently, a rehabilitation facility is being arranged.

A link with the primary health care centre and General Hospital for liaison is being considered. The load of police cases and patients from the northern emirates make any attempt for reform difficult at present. Although there are prison services, there is no close coordination to make use of the

Khor Al Anz Detention Centre for criminally mentally ill patients as a rehabilitation centre, and the influx of patients greatly undermines the efforts of the Ministry of Health at further development.

Ras Al-Khaima

A psychiatrist provides treatment for patients in the general medical ward of the General Hospital. A new female psychiatrist has been appointed and attempts are under way to build a general psychiatric ward for a regular outpatient clinic.

Sharjah

A consultant psychiatrist has been appointed to Al-Qasimi General Hospital, which has an outpatient clinic and admission beds in the general medical ward.

Fujairah

A psychiatrist is being appointed to Fujairah Hospital on the east coast to replace the resigned one who was running a psychiatric unit in the General Hospital.

Services for the mentally handicapped and geriatric

Services for the mentally handicapped and geriatric need more coordination because the medical care of this group of patients is divided not only between different ministries, but also between local and federal departments.

Philanthropists and charity groups have built many centres for the physically and mentally handicapped. Many of these centres are now occupied by both groups. The same is true for elderly people. What started as a service for the elderly turns out to be an institution for psychogeriatrics run either by the Ministry of Labour and Social Affairs or the Ministry of Health, sometimes with no joint coordination and concomitant waste of human and financial resources.

A recent survey has shown that practically, there is a centre for the mentally handicapped in each emirate run by the Ministry of Labour and Social Affairs and probably another one for the elderly. While this is

considered federal, there could be a “local” one sponsored by “private” authority.

The existing centres at present are as follows:

- Abu Dhabi Rehabilitation Centre, which caters for a mixture of mentally retarded and psychogeriatric patients with a 100-bed capacity, run by the Ministry of Health.
- Sharjah Centre for Humanitarian Services, which is a local or private institution that caters mainly for young mentally retarded, with a good standard of care.
- Abu Dhabi Centre for the Mentally Retarded, run under the auspices of the Ministry of Labour and Social Affairs, is a day centre where children come early during the day and are transported back home at the end of the day.

There are also schools for the educationally subnormal which cater for mentally retarded children. They are under no direct supervision by the Ministry of Health, but do have a liaison with the Ministry of Education.

Child and adolescent mental health services

There is a psychiatric clinic at the School Health Center in Abu Dhabi, which deals with early detection of and intervention for psychological problems in schoolchildren. Those who need further help, crisis intervention or further treatment are sent to a specialized centre at the child psychiatry unit, which is run by a general psychiatrist with special experience in child psychiatry. Until a child psychiatrist joins the department, consultant opinion can be taken from a consultant child psychiatrist at department of Psychiatry and Behavioural Sciences of the Faculty of Medicine and Health Services at United Arab Emirates University, where two child psychiatrists are employed. In Rashid Hospital, there is a child psychiatry service in a 10-bedded unit with an outpatient clinic.

Residential centre for delinquent children

As is the case with mentally retarded children and psychogeriatrics, delinquent children and substance abusers receive greater attention from society and nongovernmental organizations than the mentally ill. So, a Social Residential Centre for delinquent children and a Rehabilitation Centre for

substance abusers under either the Ministry of Labour and Social Affairs or the Ministry of Interior would be found; such patients are only brought to medical services for admission during crisis.

This problem is being addressed now by the Central Psychiatric Register, which is designed to coordinate the efforts of different ministries towards a common policy, procedure and guidelines for mental health services for those patients.

Department of Psychiatry and Behavioral Sciences, Faculty of Medicine and Health Services, United Arab Emirate University, Al-Ain

The Department of Psychiatry and Behavioural Sciences, Faculty of Medicine and Health Services, United Arab Emirates University, Al-Ain, has a small inpatient unit and good teaching staff to cover undergraduates in coordination with Al-Jimi Psychiatric Unit. Medical Students are sent for practical training to the psychiatric hospital in Abu Dhabi, which has more comprehensive facilities; and a good spirit of cooperation between the two facilities for internship training has developed.

Human resources

The number of psychiatric staff in the United Arab Emirates has increased approximately five times over the past few years in all categories of multidisciplinary team. In the Abu Dhabi psychiatric hospital, there are 22 doctors with psychiatric qualifications ranging from M.R.C. Psych. to a masters degree in psychiatry, as well as PhDs in clinical psychology and special grade psychiatric nurses from Europe. There are 15 social workers. Occupational therapists that did not exist 5 years ago are officially recognized by the Ministry of Health and have a formal job description.

Western region-Abu Dhabi: A new psychiatrist is being appointed in the new General Hospital thus covering the geographical distribution of mental health service in the seven Emirates.

Progress in national mental health programme implementation

The national mental health programme was formulated in August 1991 with 15 objectives outlined in the programme. As part of the initiative

to integrate mental health with primary health care, a WHO training course on psychiatry in primary health care is conducted in coordination with primary health care doctors in Abu Dhabi, Al-Ain and Dubai on a regular basis, in addition to training for primary health care physicians in early detection and treatment of mental illnesses. Psychiatric consultancy clinics have been opened in some of the larger primary health care centres, run by psychiatrists in conjunction with the primary health care doctors. Through the liaison and community psychiatric unit, arrange for follow-up and appointment either through the social worker in the hospital-based crisis intervention team or domiciliary service or hot-line service run by non-medical staff in the hospital. In addition, a workshop was conducted with the administrators and WHO experts and it was agreed that primary health care doctors can prescribe psychotropic drugs according to the WHO list and this procedure is being organized with the responsible agencies.

The same course is being organized for school health doctors on a regular basis in the different Emirates with the consent and permission of the Ministry of Health and certificates of attendance are being issued to encourage promotion in this field.

These continuing medical education courses are conducted simultaneously in Abu Dhabi, Al-Ain and Dubai, and occasionally in other emirates.

Public awareness programmes

The liaison and community psychiatry unit organizes a public education programme with the mass media and lectures for police who work with hospital staff in the chemical dependency unit and forensic psychiatry unit, as well as for schoolchildren who come for regular orientation visits, and school social workers and university students who come for summer training courses. There is also an intensive training programme in the day centre for patients and relatives. They are given brochures, pamphlets and posters.

Central mental health committee

A central mental health committee works directly under the Minister of Health under the chairmanship of the Undersecretary for Health and

Director of Curative Medicine as well as Heads of Psychiatric Departments and representatives from the Faculty of Medicine and Health Services, United Arab Emirates University, Al-Ain, and the legal adviser of the Minister of Health. This procedure has greatly strengthened the decisions of the committee and facilitated the meetings and decision-taking. A great deal of development has happened since then. The central mental health committee has working parties comprising medical and paramedical staff to advise on subjects pertinent to their specialties. This has facilitated recruitment, establishment of new clinics and amendment of current legislations.

Recruitment of forensic psychiatrists

Two psychiatrists, with special experience in forensic psychiatry, have been appointed by the police for prisons and medico-legal cases. They work in close cooperation with the forensic psychiatry team in the hospital. It has reduced the workload and the medico-legal complications of police cases. A common policy is being drawn up for long-stay prisoners in psychiatric wards, mentally ill offenders admission and disposal.

Mental health training for general nurses, social workers and clinical psychologists

A continuing medical education programme has been designed for regular training of general nurses, social workers and clinical psychologists, and certificates of recognition have been designed to encourage these academic activities.

An in-service training unit has been issued for the establishment of a Central Psychiatric register fully equipped with a computerized system, staff and ancillary equipment to coordinate natural mental health services with other ministries at local, regional and international levels.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is substantial epidemiological data on mental illnesses in the United Arab Emirates in internationally accessible literature. No attempt was made to include this information here.

Mental health resources

Mental health policy

A mental health policy is absent.

Substance abuse policy

A substance abuse policy is present. Details about the year of formulation are not available.

National mental health programme

A national mental health programme is present. The programme was formulated in 1991. It aims at the universal provision of mental health and substance abuse services by their incorporation in primary health care. The strategies for realizing this aim are through training of personnel in mental health at all primary care levels, strengthening existing centres and opening new ones, streamlining referral services and providing essential drugs, linking community and other sectoral services to it and developing human resources.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. Details about the year of formulation are not available.

Mental health legislation

There is a Federal Mental Health Act. It contains sections on definition of mental disorders, the role of authorities and police and on some details on detention and psychoses. The law needs to be reviewed. There is no specific mental health law on mentally abnormal offenders. The Sharia Islamic law addresses such issues. A national forensic psychiatric committee is being set up in collaboration with the ministries of health and justice. Attempted suicide is a crime. The latest legislation was enacted in 1981.

Mental health financing

Details about disability benefits for mental health are not available. Details about expenditure on mental health are not available. Details about sources of financing are not available. Details about disability benefits for mental health are not available.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. There are extensive primary care services which cater to all kinds of mental disorders.

Regular training of primary care professionals is carried out in the field of mental health.

There are community care facilities for patients with mental disorders. Facilities for rehabilitation are available through the community-based rehabilitation approach. Community care services are not well developed and this is compensated for by the primary care services.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.4
Psychiatric beds in mental hospitals per 10 000 population	
Psychiatric beds in general hospitals per 10 000 population	
Psychiatric beds in other settings per 10 000 population	
Number of psychiatrists per 100 000 population	2
Number of neurosurgeons per 100 000 population	
Number of psychiatric nurses per 100 000 population	11
Number of neurologists per 100 000 population	
Number of psychologists per 100 000 population	1
Number of social workers per 100 000 population	1.2

There are seven occupational therapists. A psychiatric hospital opened in Abu Dhabi in 1995 with facilities for general psychiatry, forensic psychiatry, addiction, emergency, child and adolescent psychiatry, consultation-liaison and community care. It has an attached day treatment centre. There are other psychiatric facilities in different cities. The private sector is well established. Most professionals work in the hospital in Abu Dhabi. In the other parts of the Emirates the number of personnel is limited, and most have 1 or 2 psychiatrists only.

Nongovernmental organizations

Details about nongovernmental organization facilities in mental health are not available.

Information gathering system

Details about mental health reporting systems are not available. The country has a data collection system or epidemiological study on mental health. A central psychiatric register has been established by the Ministry of Health for collection of data and research statistics regarding mental health, and data from all over the Emirates would be pooled into this information system.

Programmes for special populations

The country has specific programmes for mental health for elderly and children. There are services for the mentally retarded and delinquents.

There are also school health centres in some areas which deal with early detection and intervention of psychological problems in school-children. Residential centres for delinquents are also present in some areas.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: unknown.

Other information

Psychiatric services are based on the public health system which is organized on an emirate by emirate basis. A federal ministry has a coordinating role. Abu Dhabi has the most extensive services followed by Dubai. A special committee was established to advise on planning and development of psychiatric services nation-wide.

Additional sources of information

Kraya N. Thirty years on: psychiatric services in the United Arab Emirates. *Australasian psychiatry*, 2002, 10:168–171.

Kronfol NM. Perspectives on the health care system of the United Arab Emirates. *Eastern Mediterranean health journal*, 1999, 5:149–167.

Yemen

Overview

The total area of Yemen is 460 000 km². The estimated population is 21 million, with 46.2% under the age of 15 years, 2.9% above the age of 65 (2002). The total fertility rate per woman is 6.5 and 27% of the population lives in urban areas (2002). The total adult literacy rate is about 47% and adult female literacy rate is 31% (2003). The crude death rate is estimated at 11.4 per 1000 population, crude birth rate 39.2 per 1000 population, and total life expectancy at birth 62.9 years (2003). The infant mortality rate is estimated at 67.4 per 1000 live births (2000), maternal mortality ratio 36.6 per 10 000 live births (2003) and under-5 mortality rate 94.8 per 1000 live births (2001).

Per capita gross national product is US\$ 614 (2003). The Ministry of Public Health budget is 4.5% of the national budget, and the per capita expenditure by the Ministry of Public Health US\$ 6.2 as compared to national per capita expenditure of US\$ 23 on health (2001). The rates per 10 000 population for doctors, dentists, nurses/midwives and hospital beds available are of 2.2, 0.12, 4.5 and 5.9, respectively (2003). Administratively, the country is divided into 17 governorates and 238 directorates.

Development of health systems

Following unification between Democratic Yemen and Yemen Arab Republic in 1990, the entire organizational set-up of the health system went into a stage of transition. A new organizational management structure was established after unification focused on decentralization of decision-making

to district level and has defined new responsibilities of governorate and district health authorities.

The national primary health care strategy includes the following priority areas:

- development of a nationwide health care infrastructure for primary health care backed by referral care
- improvement in maternal and child health and family planning
- strengthening the control of communicable diseases
- improvement of supervision and management of public health services, including development of a programme to strengthen hospital management and health care administration
- development of an appropriate combination of public and private sectors
- development and training of health personnel including retraining, reorientation and continuous education
- community participation and decentralization of health management through defining responsibilities of governorates and district health authorities
- improvement in the quality, effectiveness and level of services of the existing health care system.

The primary health care units each serve a population of about 2000 persons and are staffed with two primary health care workers and one trained birth attendant, who are recruited locally. The primary health care centres, which serve 10 000 persons on average, are staffed with one or two physicians and between three and six nurses and a few technicians. Some centres also have 5 to 20 beds, a laboratory and X-ray section. District hospitals and a governorate hospital in the respective governorate capital area provide specialist care facilities. Specialized and university hospitals in Sana'a and Aden are the main referral centres for the country.

Nongovernmental organizations such as the Yemeni Women's Association, Yemeni Youth Association and Yemeni Red Crescent are also involved in health care delivery.

Mental health

Historical aspects

The development of mental health care in the Yemen can be divided into four periods: prior to 1966, 1966–86, 1986–90 and since 1990. In South Yemen before 1966, psychiatric patients were kept in prison, and no formal mental health services were available. In the Yemen Arab Republic (North Yemen) hundreds of psychiatric patients were kept in Al Shabaka prison, Taiz, a custodial centre in Hudaydah and in other prisons in the governorates of Dhamar and Hajjah.

At this point, there were over 500 psychiatric patients in Sana'a central prison without care and among the other general prisoners. There were 89 patients at Al Shabaka prison in cramped conditions with limited ventilation. The Dar Al Salaam prison was a little better due to the involvement of Catholic nuns caring for the inmates.

Organized mental health services started in Aden in 1966 in an isolated place in Sheikh Othman under the name of Al Salaam clinic. Following independence of the then South Yemen in 1967, outpatient services were started in this clinic. A convalescent ward followed this for recovered patients. In the 1970s, an outpatient clinic was opened in Al Jumhurriyya hospital, Sana'a, on a twice-weekly basis. Later on, a modern psychiatric hospital for 208 patients was built in Aden, funded by the Kuwaiti government.

Mental health facilities and personnel

- Sana'a: psychiatric unit at Al Thawra Hospital with daily outpatient and inpatient facilities for 20 patients; psychiatric ward in the prison with 170 patients; psychiatric hospital for females having 35 beds and daily outpatient services, which is run by a religious nongovernmental organization called *Islah*.
- Hudaydah: Dar Al Salaam Mental Hospital, housing 150–200 patients; outpatient clinics at Al Olofi Hospital and Al Thawra General Hospital;
- Taiz: Psychiatric unit with 20 beds at Al Thawra General Hospital; prison psychiatric ward with 130 patients; daily outpatient services in Al Thawra General Hospital.

- Aden: neuropsychiatric hospital with 208 beds and daily outpatient clinic; outpatient clinics at Al Jumhuriyya General Hospital and the central prison.
- Lahej: weekly outpatient clinic in general hospital since 1986.
- Abhyan: weekly outpatient clinic in general hospital since 1990.
- Mukallah: daily outpatient clinic.
- Seyun: weekly outpatient clinic.

There are 20 psychiatrists and 55 psychologists (of whom only 10 are qualified) in the country. Some of the nurses have been trained in psychiatric nursing in India and Egypt. There are three psychiatric social workers. Programmes for postgraduate training of psychiatrists have been operational since 2000.

There are two medical colleges in the country at Sana'a and Aden. Both of them have full departments of psychiatry. The current teaching of psychiatry and behavioural sciences at Sana'a University is as follows: 25 hours in the pre-clinical period, 4 weeks in clinical work during clinical training and 4 weeks of training during internship.

National mental health programme

Against the background of strongly institutional care in the country and extremely limited trained personnel, the Yemens formulated a national mental health programme with the assistance of the WHO in December 1986.

Objectives

- Development of mental health services for all in the near future with extension to rural areas to serve the ones in need particularly those improperly served, under-served and deprived within the existing services integrated with primary health care services.
- Enhanced use of modern knowledge of psychological, social and behavioural sciences and modern technology for improvement of health in general and social development.
- Encouragement of the community, represented by official and social organizations and societies, to participate in the development of the mental health programme and support it.

- Reducing the harmful caused to mental health by broken homes, internal and external migration and behavioural disorders, delinquency and drug abuse, alcohol abuse and dependency and against the sequel of sociocultural and economic changes taking place in the country affecting the community, family and individual.

Strategies

The strategies identified were to develop an administrative support system; integration of mental health within primary health care at all levels of health care; provision of essential drugs; training of personnel; special programmes for children, mentally retarded; drug dependent persons and for rehabilitation; development of a mental health information system; revision of mental health legislation and research. The period 1980–86 was a period of innovation and extension of the programmes to the community. Following the formulation of the national mental health programme, there was organizational support and extension of the pilot programmes to integrate mental health service delivery in primary health care with supervisory support from the specialist services besides training of 1784 medical officers and health personnel from distant rural health facilities and district hospitals. Outreach services were started in the governorates of Mukallah, Seyun, Abhyan and Lahej (on an average 500 patients are seen once in the two-week-visits). This was a very effective period. In some ways, the rapid progress of 1986–90 has been checked in the period prior to the start of the Nations for Mental Health programme in 1997. This is one of the reasons why, in 1997, the Yemen was selected as the site of one of WHO's demonstration programmes for its Nations for Mental Health initiative. Some of the achievements can be summarized as follows.

- The psychiatric ward for female patients in the central prison of Sana'a has been closed. The patients were shifted to a new hospital, which has 35 beds with all basic facilities, and also daily outpatient services where both men and women get free consultation. Psychiatric male patients are separated from other inmates in the prison and are treated by psychiatrists. Their number has fallen from 500 to 170. The admission of patients to the psychiatric ward in the prison and

discharge are decided by the psychiatrist and not by law-enforcing authorities in Sana'a.

- The department of psychiatry at Al-Thawra Hospital, Sana'a, the outpatient clinics at the general hospitals of Taiz, Hudaydah, and Aden and the extension clinics at Lahej, Mukallah, Seyun and Abhyan are being more openly accepted by the community and by other medical disciplines. They are serving to remove the fear and stigma of mental disorders in the community.
- The rehabilitation and vocational training centre in Sana'a offers education and training for moderately retarded adolescents. The rehabilitation and physiotherapy centre in Sana'a helps severely mentally retarded children with motor disabilities.
- The new psychiatric unit of Al Thawra hospital at Taiz is an open system. Every patient is admitted along with a relative who takes part in patient care. The relatives provide food and drugs to their patients. The average stay is 2 to 3 weeks only.
- The first drafts of the Arabic translation of a doctor's manual and health workers' manual are available.
- Regular in-service training programmes are being organized for the nurses in the neuropsychiatric hospital in Aden. Lectures on mental health are given to all the trainees of the Institute of Human Resources Development in Health, in Aden.
- Nongovernmental organizations and the public are being encouraged to donate space, buildings and funds for the treatment of the mentally ill. The Charitable Society for Social Reform is supervising the hospital for psychiatric female patients in Sana'a.
- Talk shows, interviews and discussions on various aspects of mental health are periodically given on radio and television by professional people. Articles on mental health appear in local newspapers and periodicals.

Summary update (*Mental health atlas*, 2005)

Epidemiology

There is a paucity of epidemiological data on mental illnesses in Yemen in internationally accessible literature. Hassan et al (2002) assessed the effect of *khat* chewing on mood symptoms in 200 healthy volunteers in a hospital. They used the Hospital Anxiety and Depression Scale to assess symptoms in *khat* chewing and abstinent individuals. More mood symptoms were reported by the group that continued to chew *khat*.

Mental health resources

Mental health policy

A mental health policy is present. The policy was initially formulated in 1986. The components of the policy are promotion, prevention, treatment and rehabilitation.

Substance abuse policy

A substance abuse policy is absent.

National mental health programme

A national mental health programme is present. The programme was formulated in 1983. The goals of the programme are integration of mental health services into primary care, initiating a school health programme, increasing the number of psychiatric beds in hospitals and providing training facilities.

National therapeutic drug policy/essential list of drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1986.

Mental health legislation

There is no mental health legislation. Islamic laws are used for people with mental illness.

Mental health financing

There are budget allocations for mental health. Details about expenditure on mental health are not available. The primary sources of mental health financing in descending order are out-of-pocket expenditure

by the patient or family and tax-based. The country has disability benefits for persons with mental disorders. Monthly social benefits may be given to some mentally ill patients.

Mental health facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. Primary care is available in some areas only.

Regular training of primary care professionals is carried out in the field of mental health. In 2003–2004, about 150 personnel were trained. Medical officers and health workers from rural health facilities and district hospitals and general physicians were trained. Regular in-service training is being provided to nurses.

There are no community care facilities for patients with mental disorders. A community psychiatric care demonstration project has been set up with the help of WHO.

Psychiatric beds and professionals

Total psychiatric beds per 10 000 population	1.85
Psychiatric beds in mental hospitals per 10 000 population	1.1
Psychiatric beds in general hospitals per 10 000 population	0.4
Psychiatric beds in other settings per 10 000 population	0.35
Number of psychiatrists per 100 000 population	0.5
Number of neurosurgeons per 100 000 population	0.06
Number of psychiatric nurses per 100 000 population	0.09
Number of neurologists per 100 000 population	0.08
Number of psychologists per 100 000 population	1.2
Number of social workers per 100 000 population	0.04

Some beds have been earmarked for women. The number of beds in prison psychiatric wards has been reduced by two-thirds and psychiatric patients are separated from other inmates in the prison.

Nongovernmental organizations

Nongovernmental organizations are involved with mental health in the country. They are mainly involved in treatment and rehabilitation. The

International Committee of the Red Cross has helped in the provision of services and reform in prison psychiatric wards.

Information gathering system

There is a mental health reporting system in the country. It is included in the 5-year plan of health reporting. The country has no data collection system or epidemiological study on mental health. Rehabilitation centres for mentally challenged individuals are available.

Programmes for special populations

The country has specific programmes for mental health for refugees. There is a mental hospital for women in Sanaa.

Therapeutic drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, phenobarbital, sodium valproate, amitriptyline, chlorpromazine, diazepam, haloperidol. Yemen follows the WHO Essential Drugs List.

Other information

Mental health services were practically non-existent before 1966 and patients used to be kept in prisons. Since then, a lot of improvement has occurred. Hospitals have been built, training provided to different personnel at all levels of care and the administration has been educated about psychiatric illnesses. Different nongovernmental organizations and WHO helped in building the infrastructure. However, there are some difficulties in the form of inadequate financial support or poor follow-up facilities that have slowed down the implementation of the mental health programme.

Additional sources of information

Hassan NA et al. The effect of chewing *khat* leaves on human mood. *Saudi medical journal*, 2002, 23:850–853.

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Part 3

Discussion and conclusions

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Discussion and conclusions

Global perspectives

Introduction

WHO has pioneered the development of mental health services and programmes, particularly in the developing countries. Beginning with the document *Organization of mental health services in developing countries* [7], a large number of initiatives have been taken to address the various issues in this area. Notable among these have been the development of: policies and strategies for global action for the improvement of mental health care [46-48]; guidelines of the promotion of human rights of persons with mental disorders [48,51]; checklists and glossaries on quality assurance in mental health care [52]; a consensus statement on psychosocial rehabilitation of the elderly [53,54]; basic principles of mental health care law [55]; guidelines for the elaboration and management of national programmes of mental health [11-13]; behavioural science learning modules; programmes for improving the psychosocial development of children [56]; life skills education in schools [29-34]; guidelines for the primary prevention of mental neurological and psychosocial disorders (25,26); mental health for primary care personnel on common mental disorders [57]; support materials for families with schizophrenia [58] and Alzheimer disease [59]; the Nations for Mental Health programme [60-62]; behavioural interventions in general health care [63-70]; and prevention of suicide [71-76]. All these developments provided a window of opportunity for new initiatives. One such initiative took the form of declaring mental health a WHO priority and

developing a global agenda for mental health, setting into motion the global WHO strategy for mental health, which was endorsed in November 1999 by the Director-General and the WHO cabinet.

The four themes underpinning the WHO strategy are:

- raising the level of awareness about the importance of mental health globally
- empowering policy-makers to develop effective mental health policies
- enabling mental health professionals to provide better treatment and care
- empowering people suffering from mental disorders.

The strategy was conceived as a concrete and well-focused response to the burden attributable to neuropsychiatric disorders. It is based on three interlocking initiatives, each taking into account all ages and both sexes: advocacy, policy and effective intervention.

Advocacy

- To raise the profile of mental health, particularly that of vulnerable groups, including women (Resolution of the Commission on the Status of Women 43/3, on women and mental health with emphasis on special groups), and to place it on the political, health and development agendas of governments and other organizations (international and national) with the potential to promote mental health and prevent mental illnesses.
- To check human rights violations, reduce the burden of stigma and discrimination, facilitating access to care, improved quality of care, recovery from illness, and equal participation in society.

To achieve this, WHO will mobilize a unified international advocacy agenda for the incorporation of mental health issues into the human rights legislation of countries (drawing on UN General Assembly Resolution 46/119 on the protection of persons with mental illness and the improvement of mental health care (1991) (Annex 3).

Policy

- To integrate mental health into the primary health sector at national and local levels, focusing on issues of organization and management,

financing, legislation, human resources development and training, private/public sector roles, procurement and regulation of psychotropic drugs, quality assurance for treatment and care, linkages to sectors outside health (such as housing and employment), and overcoming barriers to the implementation of effective interventions at all levels of the health system.

- To promote the adoption of a life-span perspective in order to appropriately address mental health needs that change with age; for example, the importance of early stimulation programmes and skills-building for the promotion of mental health of children and adolescents, and home care programmes for elderly patients, affected by dementia and other forms of disability, and their family caregivers.
- To promote social cohesion of communities' (for example, through institutions such as health-promoting schools and workplaces, community support and counselling networks and families).

To achieve this, WHO has developed a joint WHO/World Bank mental health reform initiative which brings together the best evidence for policy development and implementation in the context of the mental health sector and places it in the broader context of varied social, economic, political and environmental situations of countries, around the globe.

Effective intervention

- To document and disseminate the evidence base for specific cost-effective, culturally relevant treatment, prevention and promotion interventions for neuropsychiatric disorders (focusing on psychosis, depression, epilepsy, suicide prevention and vulnerable groups).
- To provide recommendations on how best to involve all the sectors concerned in promotive and preventive activities for which evidence is available.
- To provide recommendations on how best to integrate the mental health component into primary health care through training, monitoring and supervision of primary care workers by specialists, and the creation of systems of referral and back-referral between primary care and specialist services.

To achieve this WHO is supporting the launch of global campaigns targeting depression/suicide prevention schizophrenia and epilepsy, which reach out to key international and national nongovernmental organizations, professional organizations, academic institutions and civil society.

Despite the global movement towards a world more caring of its vulnerable members, there is a dramatic lack of implementation of the existing cost-effective interventions owing to a number of barriers:

- the low priority of mental health on the international and national agendas
- mental health services usually having a vertical administrative and management structure separate from that of the general health sector
- inequitable financing and health insurance that does not incorporate mental health treatment and illness prevention as a benefit
- the centralization of services, for example in large and potentially harmful psychiatric institutions, which leaves few resources for more effective community-based services
- poor or limited application of cost-effective mental health interventions because of lack of rational care guidelines, scarcity of skilled health professionals and policy-makers, inadequate monitoring of treatment and care, and restricted availability of psychotropic drugs, particularly at lower levels of the health system (poor planning of needs, distribution problems, poor regulation of prices)
- stigma and discrimination, which limit the access of patients to treatment, the degree to which doctors and health workers have been trained adequately and their willingness to intervene.

Regional perspectives

Progress in mental health

The past two decades have seen significant progress in the field of mental health. Three areas—diagnosis, treatment and prevention—are relevant for the current review of mental health programmes in the Region. Sartorius identified at the global level these developments as follows [77]:

Acceptance of psychiatry as a medical discipline rests on three premises: that its practitioners can reach a reliable diagnosis using tools that other branches of medicine use; and second, that treatment

of psychiatric disorders is possible and effective and that it can be evaluated, using criteria valid for the assessment of medical treatment; and third, that psychiatry can contribute to the improvement of public health by providing specific suggestions concerning the prevention (and the organization of treatment) of mental illness and the rehabilitation of those with it.

The progress of countries of the Eastern Mediterranean Region in the above three areas, namely understanding of mental disorders, care of mentally ill persons and prevention of mental disorders and promotion of mental health has been impressive. The situation regarding care of the mentally ill 25 years ago was largely institutionalized and centralized.

On 15 March 1979, when the “pavilion” of Ibn Rushd Hospital became the University Psychiatric Centre of Casablanca, there was only one trained psychiatrist and one resident to be in charge of three provinces and four cities namely Casablanca, Mohamedia, El Gidida and Benshimane. The building was in a terrible condition: with almost no electricity, no water supply, no doors (except some metallic ones which did not close), no glass in windows and almost no medication. The ceiling was falling on the heads of the patients and staff, and rats were usual guests of the pavilion. The image of psychiatry was terrible in the community, and the authorities decided to close the ward in the teaching hospital and to transfer the patients to a psychiatric hospital 25 km outside Casablanca. Now the same centre is recognized as a teaching and research hospital providing wide range of services and functions as a referral hospital. It also trains different categories of caregivers for Morocco and other countries.

In southern Yemen, before 1966, patients were kept in the prison, and no formal mental health services were available. The beginnings of organized mental health services were made in Aden in 1966 in an isolated place in Sheikh Othman under the name of Al Salam clinic. Initiatives have now been taken to integrate mental health with primary health care in Yemen.

The available facilities in the Region varied from large mental hospitals to prisons. The stigma attached to the mentally ill, mental hospitals and the mental health profession was high. From such a position, mental health in the Region has changed.

The most impressive of the developments is the recognition of the mental health needs of the people of the countries of the Region as indicated by formulation of national mental health programmes in most of the countries. In many countries, care has moved from the centralized institutions (prisons, mental hospitals) to general hospitals and primary health care facilities, and there has been a significant increase in the available professional training programmes and support and supervision of primary health care personnel work. Programmes for the prevention of neuropsychiatric disorders and promotion of mental health are taking root, for example, school mental health programmes, public mental health education, involvement of religious centres in mental health programmes and rehabilitation.

Involvement of universities and academic departments of psychiatry has enriched the programmes by providing leadership, quality assurance, training, support and evaluation. The changing mental health legislation highlighting the rights of the mentally ill is providing the framework for these efforts.

National mental health programmes

Beginning with the formulation of a national mental health programme by Pakistan in March 1986, currently 20 of the 22 countries of the Region have developed or formulated national mental health programmes. All of them focus on provision of mental health care for all, integration of mental health care with primary health care and community participation. Some countries have included care of war victims, prevention, information system, development of mental health infrastructure and research.

In all of the countries, the national mental health programme has come to be a rallying point for re-examination of the mental health needs and stimulus for innovative approaches to mental health care. One of the professionals of the Region expressed this as follows. "The development of a national programme of mental health has provided the much needed sense of direction to the efforts of the mental health professionals in the country". Of the many activities of the national mental health programme, the integration of mental health care with general health care is the most common activity.

The chief reason for this is the time period in which the mental health programmes are being implemented. The Alma-Ata Declaration of 1978 has had an impact in all countries of the Region. The shift from care for a few to care for all has brought into the health systems a recognition of the needs of marginalized groups, such as the mentally ill. The second reason is international movement towards non-institutional care both in rich and poor countries. Third, the availability of models of care such as integration with primary health care has made it possible to take up these programmes with limited resources. Fourth, the leadership of WHO to provide information, bringing together professionals and administrators towards an identifiable goal and over a time period of two decades, has been important. Lastly, the special sociopolitical situation has brought to public attention the mental health needs of the population. Some examples will illustrate this.

- In the Palestinian population, even before the start of the mental health programme in 1990, studies had shown a growing number of behavioural disorders, especially among the young people who account for 69% of the wounded. The present situation is expected to produce disturbances harmful to the psychosocial and behavioural development of the population, especially children. Among school teachers, there was an appreciation of psychosocial and behavioural problems among children.
- In Kuwait, following the Gulf War, a special mental health treatment facility called the Rigae centre was started to provide care for persons with post-traumatic stress disorder.
- In Lebanon, narcotic production tripled during the years of conflict, and there were an estimated 240 000 young drug addicts. These came under control with specific interventions.

The above selective review of the awareness of mental health issues indicates a major role for mental health programmes. Mental health programmes have to cater for the persons suffering from neuropsychiatric illnesses, the usual emphasis till recent times, and move on towards prevention and activities for mental health promotion.

At the regional level, the situation has implications for the future of mental health programmes—mental health programmes should develop collaborative programmes with other programmes (such as healthy lifestyle

promotion, community-based initiatives, parenting skills training, cancer, diabetes, and health education programmes). Primary health care personnel must be sensitized and trained in psychosocial skills for interventions. New studies have to be directed towards understanding the nature of psychosocial stresses and the pathways from stress to deviant behaviour and disease states.

This overview would be incomplete without reference to the limitations of the progress of the last two decades. National mental health programmes, however valuable in planning, have not received adequate financial and administrative support. The innovative approaches to mental health care have largely remained at the pilot project level or at the local level and have not spread to become national programmes. Programmes for mental health promotion and prevention of mental disorders have been seen in only some countries. All of the initiatives have depended on strong and charismatic leadership, which at times has led to the collapse of programmes with change of leadership. A number of innovative programmes have received setbacks through political change and war. These setbacks have turned the clock of progress backwards or diverted the activities of development to more immediate needs.

Evaluation and research activities to support the implementation of national programmes have been limited and not built into strategies for programme implementation. In almost all the countries, the initial goals outlined for the short term and longer term periods were very ambitious. Looking back, they were unrealistic. However they do serve as rallying points for re-examination of mental health needs and stimuli for innovations in mental health care.

The varied degrees of progress of the national mental health programmes leads us to identify the following components for success of such programmes.

Components for success of national mental health programmes

1. Formulation of a national mental health programme is valuable as a planning process at country level.
2. The creation of a mental health unit in the ministry(ies) of health is central for implementation of a national mental health programme.
3. The formation of a supportive advisory committee is needed to support the programme.
4. Planners and professionals accept the programmes more easily if they follow upon well planned and evaluated pilot programmes.
5. The stage of implementation and effectiveness of the primary health care programme are determining factors for the level of integration of mental health services.
6. Professionals, especially, those in academic departments, have to be active partners in the national mental health programme at the levels of training, support and evaluation.
7. The primary health care programme needs to be supported by a number of other activities such as use of media for raising the awareness of the public about mental health issues, development of school mental health programmes, formation and collaboration with nongovernmental organizations, self-help groups of families, and religious leaders.
8. In each country it is essential to develop viable models of care at the administrative unit level (governorate, district, *wilayat*, province) so that the essential mental health team is defined for the country based on the national health care situation.
9. Evaluation of the programme is important to continuously identify the levels of care, limits of care and the administrative supports needed for the care to be satisfactory.

Mental health professionals need to share their concerns for the mentally ill and seek support from planners and public by a process of dialogue and continuous updating of advances in the understanding of causation, availability of effective treatments, economics of care (benefits and costs) and rights of the mentally ill.

Future directions for national mental health programmes

Review of the progress of national mental health programmes indicates gradual changes over the past 20 years in the level of enthusiasm and involvement of health administrators and mental health professionals. The stimulus initiated by WHO from the mid 1980s of “reaching the unreached” and extending services needs to be strengthened by advocacy and addressing new realities.

A two-pronged strategy needs to be adopted to rekindle this waning enthusiasm. Evidence-based decision-making must be promoted right from the stage of policy-making to service delivery, by bringing together the currently seemingly divergent strands of development taking place in the disciplines concerned with study of human behaviour. Equity-based decision-making must be promoted at all levels through public education campaigns involving collaboration of all stakeholders. This two-pronged strategy has to have a strong base of robust research studies to have a chance to succeed. These will have to be both longitudinal population-based studies and focus group-based needs assessment studies. The former type of study is expensive and human resources-intensive and in the majority of the countries of the Region would be technically difficult, while the latter can be carried out more easily. We do not have the luxury of choice, but we can determine our priorities for the immediate and medium-term future which may involve focusing on studies to:

- determine the burden of common neuropsychiatric illnesses on families/caregivers;
- evaluate the efficacy, cost-effectiveness and cost-utility of biological, psychological and social interventions and models of mental health care delivery;
- assess the quality of life of individuals and families with members suffering from neuropsychiatric illnesses;
- delineate the effect of educational and behavioural modification programmes on the quality life of populations.

The mental health of the population of the countries of the Region presents a complex picture of high need and recognition of the importance of mental health as well as extremely limited resources for providing mental health care and promoting mental health. However, the limited infrastructure

offers unique opportunities to organize activities utilizing the best of the known information and models of care.

There are five major directions for the countries of the Region, namely, organization of mental health care as part of general health care; developing mental health human resources using innovative approaches; providing support to mental health programmes through legislation and research efforts; involvement of voluntary organizations and other sectors for mental health initiatives; and focusing on special areas like child mental health and urban mental health.

Integration of mental health with primary health care

The World Health Report 2001 recommended the organization of mental health care by integration of mental health with primary health care. The advantages of such integration is at many levels, from the practicality of implementation within a short period to fighting stigma of mental disorders. The majority of the countries of the Region have initiated programmes for integration of mental health care with general health services. In some countries the efforts have moved from pilot programmes to cover large population groups. In one country mental health is fully integrated in the primary health care system throughout the country. However, in many countries the effort to date has been mainly to carry out training programmes or take up pilot programmes for such integration. Some countries have developed training manuals for primary health care personnel.

This approach to the organization of services has great significance for the countries of the Region. However, in the future development of this area, there are some specific areas that need greater attention in the countries of the Region. One of these is the extension of pilot programmes to the whole country. The issue of evaluation of the programmes is vital for the future extension of the pilot programmes. Evaluation should include: the impact of training programmes through pre-post training evaluation for changes in the knowledge, attitudes and skills. The other levels of evaluation could include the level of care provided by trained medical officers in their clinical settings after a period of time from the training, the quality of psychiatric care provided, the impact of care on the patients and their families and lastly the

level and type of support required by medical officers from specialist professionals in order to undertake the care programme.

There is also need to develop training programmes that are easy and can be used in different settings in a standardized manner. The programmes should have in-built mechanisms for periodic revision, in order to make them suitable to changing social, demographic and economic contexts, such as increased urbanization.

Human resource development

The greatest barrier to mental health care programmes in the countries of the Region is the limited availability of specialist human resources. Almost all of the countries have a very limited number of mental health professionals. In some countries the number of professionals is grossly inadequate even to provide minimal psychiatric care.

The World Health Report 2003, recognized the importance of human resources as follows [78]:

The most critical issue facing health care systems is the shortage of the people who make them work. Although this crisis is greatest in developing countries, particularly in sub-Saharan Africa, it affects all nations... Furthermore, all countries are now part of the global marketplace for health professionals, and the effects of the demand–supply imbalance will only increase as trade in health services increases. Accordingly, new models for health workforce strengthening must be developed and evaluated.

There are four approaches to address this need. The first of these is to enhance training in psychiatry within undergraduate medical education. Currently the amount of training (a few hours of lectures and a few clinical sessions) does not reflect the amount of mental health work a general medical doctor has to provide, and the skills required to meet service needs are not provided as part of the training. It is also observed that, as psychiatry is not an examination topic, students often neglect this area against other competing demands. By bringing the training in psychiatry to the appropriate level, new generations of students will be fully trained in psychiatry to take up the integration of mental health with primary health care. In some countries of the Region, major changes have already been made in the

undergraduate training of psychiatry. There is need for other countries to take up similar curricular reform.

Similarly, all countries of the Region have undergraduate and postgraduate training programmes for the training of psychologists, social workers, nurses and other therapists. Most of these courses are largely academic and do not provide the trainees with opportunities to acquire knowledge and skills relevant to working in mental health care. Most such training programmes do not have practical training in clinical settings. By suitably modifying the curriculum and developing a more practical approach to training, there offers the possibility of increasing human resources for mental health care. This can be specially achieved by linking the training to the developing national programmes and the emerging roles of the voluntary organizations.

The second approach is to develop short training for non-specialists like medical officers, general psychologists and general social workers and nurses. These training programmes can be shorter than the traditional full-time courses of 2–3 years. The usual period of training is 3–6 months. The training can emphasize the clinical and practical aspects to suit the specific situation of the country or region or a programme like school mental health or rehabilitation. It is envisaged that in the course of the work, most of these short-term trained personnel will take up fuller professional training and join the professional teams as full professionals.

The third approach, specifically relevant to mental health care, is the use of a wide variety of non-professionals. Mental health programmes have pioneered the use of volunteers in suicide prevention, of patients as therapists in substance dependence programmes like Alcoholics Anonymous, and of family members as therapists to other family members. The principle here is the limited role individuals play in a specific situation, especially based on their own personal life experiences. The strength of these personnel is in their focused expertise and their acceptance by other help seekers.

The fourth approach refers to the involvement of staff of other sectors. As part of deprofessionalization, the use of personnel working with different sectors, like health, education, police, etc., has been a frequently used resource for mental health care. In this approach, the health worker, preschool teacher, schoolteacher, police etc, take on a certain component of

mental health care in addition to their other regular activities. These additions can be at the level of identification of persons needing care, referral, first aid, care of a particular level, etc. depending on the country and the type of programme. This approach not only increases the human resources available, but also destigmatizes the use of mental health care by the community as services are seen as part of the larger system of care.

Mental health education of the public

Community mental health programmes aim to provide care in the community by using the resources of the community. This is an important shift in emphasis from people being passive agents to their becoming active partners. This approach was the central message of the concept of primary health care and the Alma-Ata Declaration of 1978. It is interesting that in the Eastern Mediterranean Region, the important role of the people was recognized, nearly 30 years before Alma-Ata, by Dr Aly Tawfik Shousha, the first WHO Regional Director for the Eastern Mediterranean, in 1949 as follows. "Health is not something that can be done to people; it must be done for themselves by themselves [4]."

This approach assumes great importance in mental health. Individuals and communities are the central forces towards prevention of mental disorders and promotion of mental health. This recognition of the centrality of the community is reflected in the objectives of national mental health programmes in the countries of the Region.

WHO has rich experience in this area from its many public health programmes (such as tuberculosis, maternal health and family planning) and mental health professionals can benefit from them.

Substance abuse

Substance abuse is more than a health problem; it is a formidable moral, social and economic challenge with pandemic dimensions. Not a single country in the world can be called "drug free". The Eastern Mediterranean Region is an important centre for the production of illicit drugs (more than 75% of all world opium is grown in Afghanistan) and a transit area of the world for illicit drugs. The people of the Region are increasingly vulnerable to drug-related health, social and economic

problems. First, substance abuse in general is not showing a decreasing trend but an increasing trend. Second, the mode of use of the drugs is shifting from oral use and inhalation to the injecting route, which is more harmful. Third, younger and younger age groups are becoming victims to drug dependence, and fourth, the increasing number of women who use drugs is likely to cause greater harm to the families and community. There is a need for a strategic plan to address the issues of drug use in a multi-sectoral and multi-pronged manner.

There is a need to continue to work on substance abuse in a realistic way and in active coordination with other concerned health programmes, such as HIV/AIDS, healthy lifestyles and other sectors like law and order, justice, education and labour. Specific areas for action are the need to: improve knowledge about the regional substance abuse situation and related services; identify measures to support comprehensive country planning of substance abuse activities which in the health and social sectors would be capable of addressing primary prevention, demand reduction and harm reduction; create and/or support centres for longitudinal study of substance abuse in the countries; and collect evidence-based, region-specific models of effective drug abuse prevention, treatment and rehabilitation and encourage collaboration and intersectoral coordination of activities.

In order to address the whole range of issues caused by substance abuse, the Regional Director invited a number of experts to form a Regional Advisory Panel on Drug Abuse (RAPID) in 2002. This advisory panel developed a comprehensive strategy which combines elements for supply, demand and harm reduction. The strategy was approved by the Fifty-second Session of the Regional Committee in September 2005 (Annex 4).

Children's mental health

The proportion of the population below 15 years is more than a third of the population of the Region, and longitudinal studies carried out in countries of the Region show that the prevalence of mental health problems has increased significantly even though standards of living and the physical health of children have improved [79,80]. However, children's mental health remains a neglected area of mental health services. There are no or very few

child mental health personnel or services, even in some countries with well developed mental health services.

In the area of children's mental health, the most impressive programmes in the Region are the school mental health programmes. Egypt and Pakistan have provided models of intervention, and WHO has developed a wide range of educational materials on school mental health, life skills education in schools and the improvement of the psychosocial development of children (see References). There is need for enhancing the scope, coverage and evaluation of the initiatives in this area.

Future studies in the field of children's mental health and learning difficulties might include:

- study of the impact of school mental health programmes on academic performance and prevalence of emotional problems;
- focused studies of at-risk children such as migrant populations, children in single parent families and families under stress to understand the pathogenesis of problems;
- identification of practices in the school system having positive and negative effects on mental health;
- evaluation of different models of school mental health.

Mental health of survivors of disasters and those living in conflict situations

Addressing the needs of populations suffering from mental health problems as a result of disasters and conflict in the Eastern Mediterranean Region is a stated goal of WHO. This is highlighted by World Health Assembly resolution WHA55.10 [81], which urged Member States "to strengthen action to protect children from and in armed conflict" and resolution EB109.R8 of the Executive Board of WHO [82] which urged, "support for [the] implementation of programmes to repair the psychological damage of war, conflict and natural disasters" Several countries in the Eastern Mediterranean Region are currently in a state of conflict. A number of countries experience a wide variety of disasters, the earthquakes in the Islamic Republic of Iran and Pakistan in 2005, floods in Djibouti and the tsunami effect in Somalia being recent examples.

There is evidence that the prolonged and extensive history of suffering due to disasters and conflicts in the Eastern Mediterranean Region has resulted in a high prevalence of mental disorders. The most prevalent disorders in the general population are major depression (mean = 64%, range = 38.5% – 97%), post-traumatic stress disorder (mean = 43%, range = 20.4% – 72.8%) and anxiety (mean = 58%, range = 21.5% – 86%) [83]. The most vulnerable groups are women, children, refugees, those who are unable to receive treatment and those who suffer from torture and intense stress. The high rates of mental disorders in the general population have been addressed by professionals in a number of ways. Unfortunately for the population, disasters and conflict situations have been associated with limited mental health services, either due to migration of professionals or because the country concerned had very limited mental health infrastructure.

There is a need for countries of the Region to develop national plans for disaster mental health care, along with contingency planning, human resource development at all administrative levels. Some countries like Islamic Republic of Iran has developed such plans and programmes.

As a result, to address the situation of massive needs and limited professional resources, many innovative approaches have been adopted. These have ranged from training alternative professionals, use of community resources like teachers and volunteers or empowering the population using culturally acceptable forms of coping (Bam earthquake, Pakistan earthquake). The broad approach to addressing the needs of the survivors with higher levels of psychiatric problems, should be to view the emotional reactions, not in disease terms but as “normal” reactions to an abnormal situation. There is also need to develop a community-oriented approach to cover all of the populations.

There are six levels of intervention to address the mental health needs. First, there is a need to increase the resilience of populations. All the people must be given increased knowledge and skills on the handling of stressful life situations by promoting healthy lifestyles. This help should be available to all at the population level rather than at hospital level. Second, as there is evidence of a correlation between mother’s distress and that of the child, the whole family should become the focus for effective support. Interventions must be developed to help rebuild the family by increasing communication

among family members, strengthening family rituals and sharing of emotions. Third, community solidarity and traditional methods of support should be encouraged, as often, during times of disasters and conflicts, communities become fragmented through the massive loss of life and large-scale displacement that takes place. The rebuilding of community support networks is in reality a way of promoting mental health of the population. Fourth, the media can be an important positive influence in spreading mental health promotion messages to the general population. Fifth, mental health skills of caring for the population should be integrated with the general services, through teachers in the education system and through volunteers working in the voluntary organizations. Last, in the rebuilding of society, there is a temptation to implement short-term measures to alleviate suffering. In each situation a long-term plan to rebuild the essential mental health services at the primary, secondary and tertiary levels should become part of rebuilding of the country. [83]

Urban mental health

The progress of mental health to date has been to some extent successful in covering the rural areas using the primary health care network. However, the urban sector remains largely neglected. Currently, 15 countries of the Region have an urban population of more than 50%. In five of these it is above 80% and in another five it is between 60% and 80%. Epidemiological studies generally point to a higher prevalence of mental health problems in urban populations. Therefore it is imperative that models of mental health care, delivery, prevention of mental disorders and promotion of mental health for urban areas should receive priority. A beginning in this direction has been made, and as of 1997, 35 cities in the Region had healthy cities projects. For example, in Teheran the healthy city project has a strong mental health component. This project includes work with volunteers, school mental health and rehabilitation of war widows, along with other physical health and environmental activities. In other countries of the Region (such as Bahrain and Tunisia) community level support is provided for the chronically mentally ill and their families by visiting community psychiatric nurses. In some countries, such as Egypt,

suicide prevention is tackled through crisis centres that are being set up, and they are proving to be valuable.

Initiatives for urban mental health which may be undertaken include setting up of community-level mental health facilities such as day-care centres, half-way houses, parental skills training, crisis intervention centres, help lines, stress management programmes for working women, self-help groups of at-risk individuals, support and networking of elderly persons, decentralized services for marginalized persons (such as street children).

Legislation

The 1990s saw major changes in the approach to mental health law, significant among which is the UN Principles for the Protection of Persons with Mental Illness and for Improvement of Mental Health Care (Annex 3). Nearly half of the countries of the Region do not have mental health legislation, although a few countries have revised their mental health legislation in recent years [84]. In a number of countries, the laws relating to mental health are antiquated, and emphasis is on admission and discharge procedures. As part of their national mental health programmes, many countries are revising the laws relating to the mentally ill. In a few countries draft legislation is awaiting acceptance. The WHO Regional Office for the Eastern Mediterranean is working towards bringing laws in line with the current understanding of mental health and the rights of the mentally ill. Legislation, though only a guiding force in mental health programmes, can often lead to positive attitudes and remove the stigma of mental illness and mental health care.

The first consultation on mental health legislation was held in Alexandria, Egypt, on 1–2 May 1996. This meeting exchanged views on comparative mental health legislation in Islamic, civil and common law, and developed an agenda for an intercountry meeting. The second meeting was held in Kuwait on 2–6 October 1997. The reports of these consultations were made available to the Member States.

Research

Developments in the understanding of mental disorders and mental health have emphasized the close interaction of biological and psychosocial

factors. This shift emphasizes the need for developing country level and community level databases for action. The research needs of the Region have been repeatedly discussed in WHO intercountry meetings. There has been also a growth in mental health research in the Region. Research methodology workshops have also been organized in a number of countries. There is need for greater support [2]. This area also can enhance the role of academic departments and universities in the mental health programmes.

Conclusions

National mental health programmes have been a positive initiative of the WHO Regional Office for the Eastern Mediterranean in order to meet the mental health needs of the population of the countries of the Region. The approaches identified in 1985 and implemented during the past 20 years have set the tone for the future.

The integration of mental health into primary health care, though far from being complete in countries of the Region, has shown that services can be delivered through the existing staff, if supervisory, referral, monitoring and administrative support is provided by the specialist services. The implementation has varied across the countries, and future work should focus on model development for a geographical unit (catchment area); evaluation of impact on individuals, families and community; and development of information and quality assurance systems.

The collaboration within the health sector and other sectors is essential for preventive and promotive activities. Education and media are two of the sectors which can play a pivotal role in bringing about a lasting change in the attitudes of the community towards mental health, thereby reducing the stigmatization and discrimination endured by the mentally ill and their families on the one hand, and paving the way for incorporating principles of positive mental health in their daily life on the other. This change in attitudes can be translated into active involvement of community institutions in planning for services, their efficient delivery and monitoring of its impact on the community's well-being.

Urban populations are growing in the Region. Current programmes have not adequately covered this group. Appropriate programmes should be

developed for urban mental health care provision, prevention of mental disorders and promotion of mental health.

Research should become an important component of activities of the country mental health programmes. These should be linked to the goals of national mental health programmes. This will require training for professionals in research methodology, initiation of pilot collaborative projects and intercountry sharing of experiences and mutual support.

Legislation is an important support mechanism towards the rights of the mentally ill. Outdated legislation should be revised to bring it in harmony with the modern understanding of mental health and concepts of care.

References

1. Constitution of the World Health Organization. Geneva, Official records of WHO, No. 2:100.
2. *The world health report 2001. Mental health: new understanding, new hope*. Geneva, World Health Organization, 2001.
3. Murray CJ, Lopez AD, eds. *The global burden of disease: a comprehensive assessment of mortality and disability from disease, injuries and risk factors in 1990 and projected to 2020*. Cambridge, Massachusettes, Harvard University Press, 1996.
4. Mubbashar MH et al. Community-based rural mental health programme. Report of an experiment in Pakistan. *EMR health services journal*, 1986, 1:14–20.
5. A new era in mental health. In: *EMRO: partner in health in the Eastern Mediterranean 1949–1989*. Alexandria, Egypt, WHO Regional Office for the Eastern Mediterranean, 1991.
6. Mohit A et al. Mental health manpower development in Afghanistan: report of a training course for primary health care physicians. *Eastern Mediterranean health journal*, 1999, 5(2):215–9.
7. WHO/EMRO Interregional seminar on the organization of mental health services, Addis Ababa, Ethiopia. Alexandria, Egypt, WHO Regional Office for the Eastern Mediterranean, 1973.
8. *Organization of mental health services in developing countries*, Geneva, World Health Organization, 1975 (WHO Technical Report Series, No. 564).
9. *The first ten years of the World Health Organization, 1948–1957*, Geneva, World Health Organization, 1956.

10. Taba AH. The Eastern Mediterranean Region and its people, In: *Report of the Regional Director of the Eastern Mediterranean Region to the Alma Ata Conference*. Geneva, World Health Organization, 1978.(IC/PHC/78.6)
11. *Public mental health—guidelines for the elaboration and management of national mental health programmes*. Geneva, World Health Organization, 1996 (WHO/MNH/MND/96.19).
12. *Mental health programmes: concepts and principles*. Geneva, World Health Organization, 1992 (WHO/MNH/92.11).
13. *National mental health programmes*. Geneva, World Health Organization, 1987 (MNH/POL/87.8).
14. *Care for the mentally ill: components of mental health policies governing the provision of psychiatric service*. Geneva, World Health Organization/Montreal, Douglas Hospital Center, 1987 (WHO/POL/87.10).
15. *Global action for the improvement of mental health care: policies and strategies*. Geneva, World Health Organization, 1996 (WHO/MNH/MND/96.4).
16. *The work of WHO in the Eastern Mediterranean Region, Annual report of the Regional Director, 1 January-31 December, 1995*. Alexandria, Egypt, WHO Regional Office for the Eastern Mediterranean, 1996.
17. *Primary health care. Report of the international conference on primary health care, Alma Ata, USSR*. Geneva, World Health Organization/UNICEF, 1978 (Health for All Series, No. 1).
18. *The introduction of a mental health component into primary health care*. Geneva, World Health Organization, 1990.
19. *Essential treatments in psychiatry*. Geneva, World Health Organization, 1993 (WHO/MNH/MND/93.26).
20. Mubbashar SS, Saeed K, Gater R. Reaching the unreached. Evaluation of training of primary health care physicians. *Journal of College of Physicians and Surgeons, Pakistan*, 2001, 11(4):219–23.
21. Harding TW, Chrusciel TL. The use of psychotropic drugs in developing countries. *Bulletin of the World Health Organization*, 1975, 52:357-367.
22. Wig NN. Rational treatment in psychiatry. Perspectives on psychiatric treatment by level of care. In: Sartorius N et al., eds. *Treatment of mental*

- disorders: a review of effectiveness*. Washington DC, World Health Organization/American Psychology Association, 1993:423–41.
23. Mohit A. Mental health in Teheran in the context of the Iranian national mental health program. In: Goldberg D, Thornicroft G, eds. *Mental health in our future cities*. Psychology Press, 1998:217–38.
 24. Chisholm D et al. Integration of mental health care into primary care demonstration cost–outcome study in India and Pakistan. *British journal of psychiatry*, 2000, 176:581–8.
 25. *Prevention of mental, neurological and psychosocial disorders*, Geneva, World Health Organization, 1986.
 26. *Guidelines for the primary prevention of mental, neurological and psychosocial disorders* (5 volumes). Geneva, World Health Organization, 1994 (WHO/MNH/MND/93.21–93.24).
 27. Sartorius N. Universal strategies for the prevention of mental illness and the promotion of mental health. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester, John Wiley and Sons, 1998:61–67.
 28. *Healthy lifestyles*. Resolution adopted at the Thirty sixth session the Regional Committee for the Eastern Mediterranean. Alexandria, Egypt, WHO Regional Office for the Eastern Mediterranean, 1989 (EM/RC36/R.7).
 29. *Mental health programmes in schools*. Geneva, World Health Organization, 1994 (WHO/MNH/PSF/93.3).
 30. *Life skills education in schools*. Geneva, World Health Organization, 1994 (WHO/MNH/PSF/93.7A Rev. 1).
 31. *Training workshops for the development and implementation of life skills programmes. Life skills evaluation in schools, part 3*. Geneva, World Health Organization, 1994 (WHO/MNH/PSF/93.7 B Rev. 1).
 32. *The development and dissemination of life skills education: an overview*. Geneva, World Health Organization, 1994 (WHO/MNH/PSF/94.7).
 33. *Research to improve implementation and effectiveness of school health programmes*, Geneva, World Health Organization, 1996 (WHO/HPR/HEP/96.3).
 34. *Life skills education. Planning for research*. Geneva, World Health Organization, 1996.

35. Mubbashar MH. Promotion of mental health through school health programme, *EMR health services journal*, 1989, (6):14–9.
36. Rahman A et al. Randomised trial of the impact of school health programmes in rural Rawalpindi, Pakistan. *Lancet*, 1998, 352:1022–25.
37. Saeed K et al. Detection of disabilities by school children: a pilot study in rural Pakistan. *Tropical doctor*, 1999, 29:151–5.
38. Seif El Din AG. Evaluation of an educational training programme for the development of trainers in child mental health in Alexandria. *Eastern Mediterranean health journal*, 1996, 2(3):482.
39. Saeed K et al. The prevalence, classification and treatment of mental disorders among attenders of native faith healers in rural Pakistan. *Social psychiatry and psychiatric epidemiology*, 2000, 35:480–5.
40. Okasha A. Karam E. Mental health services and research in the Arab world. *Acta psychiatrica Scandinavica*, 98:406–413.
41. Sartorius N. Janca A. Psychiatric assessment instruments developed by the World Health Organization. *Social psychiatry and psychiatric epidemiology*, 31: 55–69.
42. Kohn R, Saxena S, Levav I et al. Treatment gap in mental health care. *WHO Bulletin*, 2004, 82: 858–866.
43. *Atlas: country profiles on mental health resources 2001*. Geneva, World Health Organization, 2001.
44. Saraceno B, Barbui C. Poverty and mental illness. *Canadian journal of psychiatry*, 1997, 42:285–290
45. Patel V et al. Poverty, psychological disorder and disability in primary care attenders in Goa, India. *British Journal of psychiatry*, 1998, 172:533–53
46. *Mental health. A call for action by world health ministers*. Geneva, World Health Organization, 2001.
47. *WHO mental health policy and service guidance package: organization of services for mental health*. Geneva, World Health Organization, 2003.
48. *WHO mental health policy and service guidance package: mental health, human rights and legislation*. Geneva, World Health Organization, 2003.
49. Chisholm D, Sanderson K, Ayuso-Mateos JL et al. Reducing the global burden of depression: population-level analysis of intervention cost-

- effectiveness in 14 world regions. *British journal of psychiatry*, 2004, 184:393–403.
50. Saraceno B. Mental health: scarce resources need new paradigms. *World Psychiatry*. 2004, 3:3–5.
 51. *Guidelines for the promotion of human rights of persons with mental disorders*. Geneva, World Health Organization, 1996 (WHO/MNH/MND/95.4).
 52. *Quality assurance in mental health care: checklists and glossaries*. Vol. 1. Geneva, World Health Organization, 1994 (WHO/MNH/MND/94.17).
 53. *Lausanne technical consensus statements on psychiatry of the elderly*. Geneva, World Health Organization, 1999.
 54. *Psychosocial rehabilitation: a consensus statement*. Geneva, World Health Organization, 1996 (WHO/MNH/MND/96.2).
 55. *Mental health care law: ten basic principles*. Geneva, World Health Organization, 1996 (WHO/MNH/MND/96.9).
 56. *Learning to be parents. An annotated bibliography of programmes for young people*. Geneva, World Health Organization, 1985 (WHO/MNH/PRO.88.1).
 57. *Diagnosis and management of common mental disorders in primary care*. Geneva, World Health Organization, 1998 (WHO/MSA/MNH/EAC/98.1).
 58. *Schizophrenia information for families*. Geneva, World Health Organization, 1992 (WHO/MNH/MND/92.8).
 59. *Alzheimer disease: help for caregivers*. Geneva, World Health Organization, 1994 (WHO/MNH/MND/94.8).
 60. *Nations for mental health: a special programme for mental health in underserved populations*. Geneva, World Health Organization, 1996 (WHO/MSA/MNH/96.5).
 61. *Nations for mental health: an overview of the strategy to improve the mental health of underserved populations*. Geneva, World Health Organization, 1997 (WHO/MSA/NAM/97.3).
 62. *Nations for mental health: recommendations for evaluation*. Geneva, World Health Organization, 1998 (WHO/MSA/NAM/98.1).

63. *Preparing patients for invasive medical and surgical procedures: behavioural and cognitive aspects*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2A).
64. *Communicating bad news*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2B).
65. *Introducing parents to their abnormal baby*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2D).
66. *Promoting non-pharmacological interventions to treat elevated blood pressure*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2C).
67. *Psychological interventions for patients with chronic back pain*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2E).
68. *Self-management of recurrent headache*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2F).
69. *Improving adherence behaviour with treatment regimens*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2G).
70. *Insomnia: behavioural and cognitive interventions*. Geneva, World Health Organization, 1993 (WHO/MNH/PSF/93.2G).
71. *Preventing suicide: a resource for general physicians*. Geneva, World Health Organization, 2000 (WHO/MNH/MBD/00.1).
72. *Preventing suicide: a resource for media professionals*. Geneva, World Health Organization, 2000 (WHO/MNH/MBD/00.2).
73. *Preventing suicide: a resource for teachers and school staff*. Geneva, World Health Organization, 2000 (WHO/MNH/MBD/00.3).
74. *Preventing suicide: a resource for prison officers*. Geneva, World Health Organization, 2000 (WHO/MNH/MBD/00.4).
75. *Preventing suicide: a resource for primary health care workers*. Geneva, World Health Organization, 2000 (WHO/MNH/MBD/00.5).
76. *Preventing suicide: how to start a survivor group*. Geneva, World Health Organization, 2000 (WHO/MNH/MBD/00.6).
77. Sartorius N. Introduction. In: Sartorius N et al, eds. *Treatment of mental disorders: a review of effectiveness*. Washington DC, World Health Organization/American Psychological Association, 1993:xv–xx.

78. *The world health report 2003. Shaping the future*. Geneva, World Health Organization, 2003:110.
79. Rahim SIA, Cederbald M. Effects of rapid urbanization of child behaviour in a part of Khartoum, Sudan. *Journal of child psychology and psychiatry*, 1984, 25(4):629–41.
80. Giel R et al. Childhood mental disorders in primary health care: results of observations in four developing countries. *Pediatrics*, 1981, 68: 677–683.
81. World Health Organization, *Mental health: responding to the call for action*, WHA55.10, 18 May 2002.
82. World Health Organization, *Strengthening mental health*, EB109.R8, 17 January 2002.
83. Ghosh N, Mohit A, Murthy RS, Mental health in countries of the Eastern Mediterranean Region in conflict situations. *Journal of the Royal Society for Promotion of Health*, 2004, 124:268–270.
84. *Mental health ordinance 2001*. Gazette of Pakistan, extra, 20 February 2001 [part1].

Annexes

Annex 1

WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean
ORGANISATION MONDIALE DE LA SANTE
Bureau régional de la Méditerranée orientale



مَنْظَرُ الصِّحَّةِ الْعَالَمِيَّةِ
المكتب الإقليمي لشرق المتوسط

Joint Statement on Mental Health By the Ministers of Health of the Eastern Mediterranean Region

At a special meeting of the Forty-Fourth Session
of the Regional Committee for the Eastern Mediterranean
Teheran, Islamic Republic of Iran, 4-7 October 1997

We, the Ministers of Health (or designated representatives) of the countries of the Eastern Mediterranean Region of the World Health Organization, desiring to improve the mental health and well-being of the people of the Region, pledge ourselves to:

1. **Support** our national mental health policies and programmes, and review them as necessary to identify the factors that hinder these policies and programmes from having the optimal outcome;
2. **Coordinate** with other concerned social sectors in all areas that impinge upon the mental health and well-being of the people;
3. **Raise** awareness of mental health issues among the public, professionals and policy-makers;
4. **Encourage** and work with nongovernmental organizations and institutions involved in the fostering and development of mental well-being.

Handwritten signatures and names of representatives from various countries in the Eastern Mediterranean Region, including:

- Algeria (الجزائر)
- Armenia (أرمينيا)
- Azerbaijan (أذربيجان)
- Bahrain (البحرين)
- Cyprus (قبرس)
- Egypt (مصر)
- Iran (إيران)
- Jordan (الأردن)
- Kuwait (الكويت)
- Lebanon (لبنان)
- Morocco (المغرب)
- Oman (عمان)
- Pakistan (باكستان)
- Qatar (قطر)
- Saudi Arabia (السعودية)
- Sri Lanka (سريلانكا)
- Tunisia (تونس)
- Yemen (اليمن)

6. X. 27

5 October 1997

Annex 2

Questionnaire on country mental health information

Name of country-----

Year of report-----

1. Country's population based on the last official census divided to men, women and groups, rural/urban, population shifts rural/urban.
 - 1.1 Total population.....
 - 1.2 Sex distribution: Males.....Females.....
 - 1.3 Urban population.....Rural.....Nomadic.....
 - 1.4 Age distribution: <15 years.....> 60 years.....
 - 1.5 Literacy rate: Males.....Females.....Total Pop.....
2. The structure of health sector (primary health care system).
(Describe basic unit, different levels of care and health facilities and personnel available in the country).
3. Main health indicators
 - 3.1 Life expectancy at birth.....
 - 3.2 Birth rate.....
 - 3.3 Death rate.....
 - 3.4 Infant mortality rate.....
 - 3.5 Under-5 mortality rate.....
 - 3.6 Maternal mortality rate.....
 - 3.7 Low-birth-weight babies (<2500 g at birth).....
 - 3.8 Safe water supply coverage.....

3.9 Sanitary facilities coverage.....

3.10 Immunization coverage.....

3.11 Population covered by health care.....

4. Health facilities and health personnel: Total

4.1 Hospital beds per 10,000 pop.....

4.2 Physicians per 10,000 pop.....

4.3 Dentists per 10,000 pop.....

4.4 Nurses and midwives per 10,000 pop.....

4.5 Primary health care unit per 10,000 pop.....

5. Leading causes of death (in hospitals)

Mental health infrastructure

6. Hospital facilities

6.1 Mental hospitals

	Location	No. of beds	Year of starting
1.			
2.			
3.			
4.			
5.			

6.2 General hospital psychiatric units

	Location	No. of beds	Year of starting
1.			
2.			
3.			
4.			
5.			

6.3 Private psychiatric hospitals

	Location	No. of beds	Year of starting
1.			
2.			
3.			

4.

5.

6.4 Specialized facilities (use additional page, if needed)

6.4.1 Child mental health

6.4.2 Geriatric psychiatric units

6.4.3 Drug dependence units

Location	No. of beds	Year of starting
----------	-------------	------------------

1.

2.

3.

4.

5.

(use additional space if needed)

6.4.4 Community care facilities (half-way homes, hostels, long-stay homes)

6.4.5 Mental retardation facilities

7. Human resources

7.1 Psychiatrists	Total.....	Year.....
-------------------	------------	-----------

7.1.1 Government

7.1.2 Private psychiatrists.....

7.1.3 Academic service.....

7.1.4 Child psychiatry.....

7.1.5 Drug abuse.....

7.1.6 Geriatric psychiatry.....

7.1.7 Military sector

7.1.8 Others

7.2 Trained clinical psychologists	Total.....
------------------------------------	------------

7.2.1 Government service.....

7.2.2 Private sector.....

7.2.3 Specialist areas

7.2.3.1 Child mental health.....

7.2.3.2 Drug abuse.....

7.2.3.3 Mental retardation.....

- 7.2.3.4 Others.....
- 7.3 Trained psychiatric social workers.....
- 7.4 Trained psychiatric nurses.....
- 7.5 Neurologists.....
8. Training programmes
- 8.1 Undergraduate medical training in mental health
- 8.1.1 Hours of teaching (lectures).....
- 8.1.2 Hours of clinical work.....
- 8.1.3 Posting during internship..... Yes/No
- 8.1.4 Examination subject..... Yes/No
- 8.1.4.1 Separate paper..... Yes/No
- 8.1.4.2 Part of medicine paper..... Yes/No
- Describe the training and recent changes in training
- 8.2 Training of psychiatrists
- 8.2.1 M.D. programme Yes/No/Not available.
- No of positions/year.....
- 8.2.2 Diploma in psychological medicine Yes/No/Not available
- No. of positions/year.....
- 8.2.3 Specialized training (e.g. child psychiatry, etc.)
- 8.2.4 Total No. of training centres.....
- 8.3 Training of clinical psychologists
- 8.4 Training of psychiatric social workers
- 8.5 Training of psychiatric nurses
- 8.6 Any other training
9. National Programme of Mental Health
- 9.1 Does the country have a National Programme of Mental Health (NPMH)? Yes/No
- If yes, year of formulation.....
- If no, are there plans for formulation of a NPMH when is it likely to occur? Yes/No
10. Support for the NPMH (If yes to 9.1)
- 10.1 Approved by the parliament or equivalent legislative body Yes/No

10.2	Approved by the cabinet of ministers	Yes/No
10.3	Signed by the Minister of Health	Yes/No
10.4	Formation of a National Mental Health Advisory Committee.	Yes/No
10.5	Identification of a mental health office/unit in the Ministry of Health	Yes/No
10.6	Availability of NPMH as a document	Yes/No
11.	What are the essential components of NPMH?	
11.1	Universal coverage of basic mental health services	Yes/No
11.2	Integration with general health care	Yes/No
11.3	Identification of levels of mental health care	Yes/No
11.4	Dissemination of mental health skills to periphery	Yes/No
11.5	Task distribution for mental health care	Yes/No
11.6	Integration with education system	Yes/No
11.7	Human resources development: undergraduate	Yes/No
11.8	Human resources development: mental health professionals	Yes/No
11.9	Legislation	Yes/No
11.10	Rehabilitation	Yes/No
11.11	Welfare benefits	Yes/No
11.12	NGO involvement	Yes/No
11.13	Public education	Yes/No
11.14	Prevention of mental disorders	Yes/No
11.15	Promotion of mental health	Yes/No
11.16	Improvement of mental hospitals	Yes/No
11.17	Information system	Yes/No
11.18	Community involvement	Yes/No
11.19	Drug abuse programmes	Yes/No
11.20	Geriatric services	Yes/No
11.21	Child mental health	Yes/No
11.22	Parental skills training programme	Yes/No
11.23	Mental health skills for private sector health personnel	Yes/No
11.24	Self-help groups for families	Yes/No
11.25	Urban mental health	Yes/No
11.26	Disaster care	Yes/No

11.27 Others

12. Implementation of the NPMH:.....to.....

Activity	Nationwide	Region	Pilot programme	Not applicable	Other comments
1. Universal coverage					
2. Integration into PHC					
3. Levels of MNH care					
4. Dissemination of mental health skills					
5. Task distribution					
6. Integration into education system					
7. Human resources: UG					
8. Human resources: PG					
9. Legislation					
10. Rehabilitation					
11. Welfare benefits					
12. NGO involvement					
13. Public education					
14. Prevention					
15. Promotion					
16. Mental hospitals					
17. Information system					
18. Community involvement					
19. Drug abuse					
20. Geriatric service					
21. Child mental health					
22. Parental skills					
23. Private sector					
24. Self-help groups					
25. Urban mental health					
26. Disaster care					
27. Others					

13. Training programmes undertaken as part of NPMH

	Year	Approx. No.
13.1 Medical administrators
13.2 Politicians
13.3 Psychiatrists
13.4 Clinical psychologists
13.5 Psychiatric social workers
13.6 Psychiatric nurses

13.7 Primary care doctors	.....	.....
13.8 Primary care workers	.....	.....
13.9 Prison staff	.....	.....
13.10 Educational administrators	.....	.....
13.11 Teachers	.....	.....
13.12 Welfare administrators	.....	.....
13.15 Child care workers	.....	.....
13.16 NGO staff	.....	.....
13.17 Others	.....	.....
14. Training materials developed in the country		Year
14.1 Manual for primary care physicians	Yes/No	.....
14.2 Manual for primary care workers	Yes/No	.....
14.3 Manual for schoolteachers	Yes/No	.....
14.4 Manual for NGO staff	Yes/No	.....
14.5 Pamphlets for general public	Yes/No	.....
14.6 Posters on mental health	Yes/No	.....
14.7 Videos for general public	Yes/No	.....
14.8 Videos for training non-specialists	Yes/No	.....
14.9 TV programmes	Yes/No	.....
14.10 Radio plays/programmes	Yes/No	.....
14.11 Others (specify)	Yes/No	.....
15. Innovative approaches to mental health care		
15.1 School mental health	Yes/No	
15.2 Volunteers in urban areas	Yes/No	
15.3 Involvement of traditional healers	Yes/No	
15.4 NGO initiatives	Yes/No	
15.5 Self help groups	Yes/No	
15.6 Others		

(Please describe each of these in detail using additional sheets under the following headings)

- Year of starting
- Reason for starting
- Choice of intervention

- Choice of personnel
 - Choice of tasks
 - Monitoring of work
 - Extension from pilot phase to larger areas
 - Impact of the programme
 - Outcome of the programme
 - Acceptance by professionals, policy-makers and people
16. What additional assistance is required for fuller implementation of NPMH in your country?
- 16.1 Trained human resources
 - 16.2 Technical information
 - 16.3 Funds
 - 16.4 Intersectoral collaboration
 - 16.5 Others (Specify)....
17. What are the limitations of the NPMH as it applies to your country?
- 17.1 Incompatibility of the programme with the health sector Yes/No
 - 17.2 Incompatibility of the programme with sociocultural values of people
 - 17.3 Mental health professional attitudes
 - 17.4 Financial inputs
 - 17.5 Other
- (NB: Please give specific example for each item)

Treatment system

18. Essential psychiatric drugs
- 18.1 Primary care level
 - 18.1.1
 - 18.1.2
 - 18.1.3
 - 18.1.4
 - 18.1.5
 - 18.2 Secondary care level
 - 18.2.1
 - 18.2.2
 - 18.2.3
 - 18.2.4
 - 18.2.5

18.2.6

18.2.7

18.2.8

18.3 Tertiary care level

18.4 Availability of essential drugs at all times

18.4.1 Primary care level Yes/No/Variable

18.4.2 Secondary care level Yes/No/Variable

18.4.3 Tertiary care level Yes/No/Variable

18.5 Production of essential psychiatric drugs within the country?

18.5.1 Chlorpromazine Adequate/Not adequate / Not produced

18.5.2 Amitriptyline/Impramine Adequate/Not adequate/Not produced

18.5.3 Phenobarbitone Adequate/Not adequate/Not produced

18.5.4 Inj. Anatenzol Adequate/Not adequate/Not produced

18.5.5 Trihexyphenidyl Adequate/Not adequate/Not produced

18.5.6 Lithium carbonate Adequate/Not adequate/Not produced

18.5.7 Haloperidol Adequate/Not adequate/Not produced

18.5.8 Fluoxetine Adequate/Not adequate/Not produced

18.5.9 Sodium pentothal Adequate/Not adequate/Not produced

18.5.10 Diazepam Adequate/Not adequate/Not produced

18.5.11 Alprazolam Adequate/Not adequate/Not produced

18.5.12 Antabuse Adequate/Not adequate/Not produced

19. Information system

19.1 Is there a mental health information system concerning the country? Yes/No

19.2 If yes, what are the components?

19.2.1 Admissions/discharges

19.2.2 OPD attendance

19.2.3 Duration of stay

19.2.4 Legal admissions

19.2.5 Other

20. Evaluation of NPMH

20.1 What is the current evaluation mechanism for the mental health programme?

20.2 What are the indicators used for monitoring?

20.2.1

20.2.2

20.2.3

20.2.4

20.2.5

20.2.6

20.3 Has there been an independent evaluation of any of the mental health programme activities? Yes/No

Please give details....

21. Mental health research

21.1 Does a national level research body for medical research exist?

Yes/No

If yes, please give name and details.

21.2 Sources of funding for mental health research

21.2.1 National research body Yes/No

21.2.2 Ministry of Health Yes/No

21.2.3 WHO Yes/No

21.2.4 UNICEF Yes/No

21.2.5 NGO Yes/No

21.2.6 Others

21.3 Has there been any research methodology workshop on mental health? Yes/No

If yes, please give details.....

21.4 What were the projects identified as priority for mental health research relevant to your country?

21.4.1

21.4.2

21.4.3

21.4.4

21.4.5

21.4.6

21.4.7

21.4.8

21.4.9

21.4.10

21.5 What are the major research projects completed in the country (during the last ten years)

Please use additional pages, if required.

21.6 What are the constraints for mental health research?

21.6.1

21.6.2

21.6.3

21.6.4

21.6.5

21.7 What are the priority topics for research in:

- the next two years?
- the next five years?

21.8 List the mental health publications from your country

22. Legislation

22.1 What is the current law relating to mental health care in the country?

22.2 What are the limitations of the law?

22.3 What have been the efforts to revise the law?

22.4 What is the current phase of revision of the mental health legislation?

23. Mental health related indicators (Add)

23.1 Suicide rate

23.2 Homicide rate

23.3 Divorce rate

23.4 Prison population (10 000 population)

23.5 Homeless persons

23.6 Street children

23.7 Refugees

23.8 Children in institutions

23.9 Involuntary admissions to mental hospitals

23.10 New long stay patients- (more than one year admission)

23.11 Custodial care patients (>5 years)

24. Please describe in one page the highlights of the country mental health profile during the past 20 years (in your own words)

25. Please describe in one page what you would like to see happening in the area of mental health in your country in the next 10 years?

26. Any other information.....

Annex 3

Principles for the protection of persons with mental illness and the improvement of mental health care

adopted by United Nations General Assembly resolution 46/119 of 17 December 1991

Application

These Principles shall be applied without discrimination of any kind such as on grounds of disability, race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, legal or social status, age, property or birth.

Definitions

In these Principles:

“Counsel” means a legal or other qualified representative;

“Independent authority” means a competent and independent authority prescribed by domestic law;

“Mental health care” includes analysis and diagnosis of a person's mental condition, and treatment, care and rehabilitation for a mental illness or suspected mental illness;

“Mental health facility” means any establishment, or any unit of an establishment, which as its primary function provides mental health care;

“Mental health practitioner” means a medical doctor, clinical psychologist, nurse, social worker or other appropriately trained and qualified person with specific skills relevant to mental health care;

“Patient” means a person receiving mental health care and includes all persons who are admitted to a mental health facility;

“Personal representative” means a person charged by law with the duty of representing a patient's interests in any specified respect or of exercising specified rights on the patient's behalf, and includes the parent or legal guardian of a minor unless otherwise provided by domestic law;

“The review body” means the body established in accordance with Principle 17 to review the involuntary admission or retention of a patient in a mental health facility.

General limitation clause

The exercise of the rights set forth in these Principles may be subject only to such limitations as are prescribed by law and are necessary to protect the health or safety of the person concerned or of others, or otherwise to protect public safety, order, health or morals or the fundamental rights and freedoms of others.

Principle 1

Fundamental freedoms and basic rights

1. All persons have the right to the best available mental health care, which shall be part of the health and social care system.
2. All persons with a mental illness, or who are being treated as such persons, shall be treated with humanity and respect for the inherent dignity of the human person.
3. All persons with a mental illness, or who are being treated as such persons, have the right to protection from economic, sexual and other forms of exploitation, physical or other abuse and degrading treatment.
4. There shall be no discrimination on the grounds of mental illness.
“Discrimination” means any distinction, exclusion or preference that

has the effect of nullifying or impairing equal enjoyment of rights. Special measures solely to protect the rights, or secure the advancement, of persons with mental illness shall not be deemed to be discriminatory. Discrimination does not include any distinction, exclusion or preference undertaken in accordance with the provisions of these Principles and necessary to protect the human rights of a person with a mental illness or of other individuals.

5. Every person with a mental illness shall have the right to exercise all civil, political, economic, social and cultural rights as recognized in the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, and in other relevant instruments, such as the Declaration on the Rights of Disabled Persons and the Body of Principles for the Protection of All Persons under Any Form of Detention or Imprisonment.
6. Any decision that, by reason of his or her mental illness, a person lacks legal capacity, and any decision that, in consequence of such incapacity, a personal representative shall be appointed, shall be made only after a fair hearing by an independent and impartial tribunal established by domestic law. The person whose capacity is at issue shall be entitled to be represented by a counsel. If the person whose capacity is at issue does not himself or herself secure such representation, it shall be made available without payment by that person to the extent that he or she does not have sufficient means to pay for it. The counsel shall not in the same proceedings represent a mental health facility or its personnel and shall not also represent a member of the family of the person whose capacity is at issue unless the tribunal is satisfied that there is no conflict of interest. Decisions regarding capacity and the need for a personal representative shall be reviewed at reasonable intervals prescribed by domestic law. The person whose capacity is at issue, his or her personal representative, if any, and any other interested person shall have the right to appeal to a higher court against any such decision.

7. Where a court or other competent tribunal finds that a person with mental illness is unable to manage his or her own affairs, measures shall be taken, so far as is necessary and appropriate to that person's condition, to ensure the protection of his or her interest.

Principle 2

Protection of minors

Special care should be given within the purposes of these Principles and within the context of domestic law relating to the protection of minors to protect the rights of minors, including, if necessary, the appointment of a personal representative other than a family member.

Principle 3

Life in the community

Every person with a mental illness shall have the right to live and work, as far as possible, in the community.

Principle 4

Determination of mental illness

1. A determination that a person has a mental illness shall be made in accordance with internationally accepted medical standards.
2. A determination of mental illness shall never be made on the basis of political, economic or social status, or membership of a cultural, racial or religious group, or any other reason not directly relevant to mental health status.
3. Family or professional conflict, or non-conformity with moral, social, cultural or political values or religious beliefs prevailing in a person's community, shall never be a determining factor in diagnosing mental illness.
4. A background of past treatment or hospitalization as a patient shall not of itself justify any present or future determination of mental illness.
5. No person or authority shall classify a person as having, or otherwise indicate that a person has, a mental illness except for purposes directly relating to mental illness or the consequences of mental illness.

*Principle 5**Medical examination*

No person shall be compelled to undergo medical examination with a view to determining whether or not he or she has a mental illness except in accordance with a procedure authorized by domestic law.

*Principle 6**Confidentiality*

The right of confidentiality of information concerning all persons to whom these Principles apply shall be respected.

*Principle 7**Role of community and culture*

1. Every patient shall have the right to be treated and cared for, as far as possible, in the community in which he or she lives.
2. Where treatment takes place in a mental health facility, a patient shall have the right, whenever possible, to be treated near his or her home or the home of his or her relatives or friends and shall have the right to return to the community as soon as possible.
3. Every patient shall have the right to treatment suited to his or her cultural background.

*Principle 8**Standards of care*

1. Every patient shall have the right to receive such health and social care as is appropriate to his or her health needs, and is entitled to care and treatment in accordance with the same standards as other ill persons.
2. Every patient shall be protected from harm, including unjustified medication, abuse by other patients, staff or others or other acts causing mental distress or physical discomfort.

*Principle 9**Treatment*

1. Every patient shall have the right to be treated in the least restrictive environment and with the least restrictive or intrusive treatment appropriate to the patient's health needs and the need to protect the physical safety of others.
2. The treatment and care of every patient shall be based on an individually prescribed plan, discussed with the patient, reviewed regularly, revised as necessary and provided by qualified professional staff.
3. Mental health care shall always be provided in accordance with applicable standards of ethics for mental health practitioners, including internationally accepted standards such as the Principles of Medical Ethics adopted by the United Nations General Assembly. Mental health knowledge and skills shall never be abused.
4. The treatment of every patient shall be directed towards preserving and enhancing personal autonomy.

*Principle 10**Medication*

1. Medication shall meet the best health needs of the patient, shall be given to a patient only for therapeutic or diagnostic purposes and shall never be administered as a punishment or for the convenience of others. Subject to the provisions of paragraph 15 of Principle 11, mental health practitioners shall only administer medication of known or demonstrated efficacy.
2. All medication shall be prescribed by a mental health practitioner authorized by law and shall be recorded in the patient's records.

*Principle 11**Consent to treatment*

1. No treatment shall be given to a patient without his or her informed consent, except as provided for in paragraphs 6, 7, 8, 13 and 15 below.
2. Informed consent is consent obtained freely, without threats or improper inducements, after appropriate disclosure to the patient of adequate and understandable information in a form and language understood by the patient on:
 - (a) The diagnostic assessment;
 - (b) The purpose, method, likely duration and expected benefit of the proposed treatment;
 - (c) Alternative modes of treatment, including those less intrusive; and
 - (d) Possible pain or discomfort, risks and side-effects of the proposed treatment.
3. A patient may request the presence of a person or persons of the patient's choosing during the procedure for granting consent.
4. A patient has the right to refuse or stop treatment, except as provided for in paragraphs 6, 7, 8, 13 and 15 below. The consequences of refusing or stopping treatment must be explained to the patient.
5. A patient shall never be invited or induced to waive the right to informed consent. If the patient should seek to do so, it shall be explained to the patient that the treatment cannot be given without informed consent.
6. Except as provided in paragraphs 7, 8, 12, 13, 14 and 15 below, a proposed plan of treatment may be given to a patient without a patient's informed consent if the following conditions are satisfied:
 - (a) The patient is, at the relevant time, held as an involuntary patient;
 - (b) An independent authority, having in its possession all relevant information, including the information specified in paragraph 2

above, is satisfied that, at the relevant time, the patient lacks the capacity to give or withhold informed consent to the proposed plan of treatment or, if domestic legislation so provides, that, having regard to the patient's own safety or the safety of others, the patient unreasonably withholds such consent; and

- (c) The independent authority is satisfied that the proposed plan of treatment is in the best interest of the patient's health needs.
1. Paragraph 6 above does not apply to a patient with a personal representative empowered by law to consent to treatment for the patient; but, except as provided in paragraphs 12, 13, 14 and 15 below, treatment may be given to such a patient without his or her informed consent if the personal representative, having been given the information described in paragraph 2 above, consents on the patient's behalf.
 2. Except as provided in paragraphs 12, 13, 14 and 15 below, treatment may also be given to any patient without the patient's informed consent if a qualified mental health practitioner authorized by law determines that it is urgently necessary in order to prevent immediate or imminent harm to the patient or to other persons. Such treatment shall not be prolonged beyond the period that is strictly necessary for this purpose.
 3. Where any treatment is authorized without the patient's informed consent, every effort shall nevertheless be made to inform the patient about the nature of the treatment and any possible alternatives and to involve the patient as far as practicable in the development of the treatment plan.
 4. All treatment shall be immediately recorded in the patient's medical records, with an indication of whether involuntary or voluntary.
 5. Physical restraint or involuntary seclusion of a patient shall not be employed except in accordance with the officially approved procedures of the mental health facility and only when it is the only means available to prevent immediate or imminent harm to the patient or others. It shall not be prolonged beyond the period which is strictly necessary for this purpose. All instances of physical restraint or

involuntary seclusion, the reasons for them and their nature and extent shall be recorded in the patient's medical record. A patient who is restrained or secluded shall be kept under humane conditions and be under the care and close and regular supervision of qualified members of the staff. A personal representative, if any and if relevant, shall be given prompt notice of any physical restraint or involuntary seclusion of the patient.

6. Sterilization shall never be carried out as a treatment for mental illness.
7. A major medical or surgical procedure may be carried out on a person with mental illness only where it is permitted by domestic law, where it is considered that it would best serve the health needs of the patient and where the patient gives informed consent, except that, where the patient is unable to give informed consent, the procedure shall be authorized only after independent review.
8. Psychosurgery and other intrusive and irreversible treatments for mental illness shall never be carried out on a patient who is an involuntary patient in a mental health facility and, to the extent that domestic law permits them to be carried out, they may be carried out on any other patient only where the patient has given informed consent and an independent external body has satisfied itself that there is genuine informed consent and that the treatment best serves the health needs of the patient.
9. Clinical trials and experimental treatment shall never be carried out on any patient without informed consent, except that a patient who is unable to give informed consent may be admitted to a clinical trial or given experimental treatment, but only with the approval of a competent, independent review body specifically constituted for this purpose.
10. In the cases specified in paragraphs 6, 7, 8, 13, 14 and 15 above, the patient or his or her personal representative, or any interested person, shall have the right to appeal to a judicial or other independent authority concerning any treatment given to him or her.

*Principle 12**Notice of rights*

1. A patient in a mental health facility shall be informed as soon as possible after admission, in a form and a language which the patient understands, of all his or her rights in accordance with these Principles and under domestic law, which information shall include an explanation of those rights and how to exercise them.
2. If and for so long as a patient is unable to understand such information, the rights of the patient shall be communicated to the personal representative, if any and if appropriate, and to the person or persons best able to represent the patient's interests and willing to do so.
3. A patient who has the necessary capacity has the right to nominate a person who should be informed on his or her behalf, as well as a person to represent his or her interests to the authorities of the facility.

*Principle 13**Rights and conditions in mental health facilities*

1. Every patient in a mental health facility shall, in particular, have the right to full respect for his or her:
 - (a) Recognition everywhere as a person before the law;
 - (b) Privacy;
 - (c) Freedom of communication, which includes freedom to communicate with other persons in the facility; freedom to send and receive uncensored private communications; freedom to receive, in private, visits from a counsel or personal representative and, at all reasonable times, from other visitors; and freedom of access to postal and telephone services and to newspapers, radio and television;
 - (d) Freedom of religion or belief.

2. The environment and living conditions in mental health facilities shall be as close as possible to those of the normal life of persons of similar age and in particular shall include:
 - (a) Facilities for recreational and leisure activities;
 - (b) Facilities for education;
 - (c) Facilities to purchase or receive items for daily living, recreation and communication;
 - (d) Facilities, and encouragement to use such facilities, for a patient's engagement in active occupation suited to his or her social and cultural background, and for appropriate vocational rehabilitation measures to promote reintegration in the community. These measures should include vocational guidance, vocational training and placement services to enable patients to secure or retain employment in the community.
3. In no circumstances shall a patient be subject to forced labour. Within the limits compatible with the needs of the patient and with the requirements of institutional administration, a patient shall be able to choose the type of work he or she wishes to perform.
4. The labour of a patient in a mental health facility shall not be exploited. Every such patient shall have the right to receive the same remuneration for any work which he or she does as would, according to domestic law or custom, be paid for such work to a non-patient. Every such patient shall, in any event, have the right to receive a fair share of any remuneration which is paid to the mental health facility for his or her work.

Principle 14

Resources for mental health facilities

1. A mental health facility shall have access to the same level of resources as any other health establishment, and in particular:

- (a) Qualified medical and other appropriate professional staff in sufficient numbers and with adequate space to provide each patient with privacy and a programme of appropriate and active therapy;
 - (b) Diagnostic and therapeutic equipment for the patient;
 - (c) Appropriate professional care; and
 - (d) Adequate, regular and comprehensive treatment, including supplies of medication.
2. Every mental health facility shall be inspected by the competent authorities with sufficient frequency to ensure that the conditions, treatment and care of patients comply with these Principles.

Principle 15

Admission principles

1. Where a person needs treatment in a mental health facility, every effort shall be made to avoid involuntary admission.
2. Access to a mental health facility shall be administered in the same way as access to any other facility for any other illness.
3. Every patient not admitted involuntarily shall have the right to leave the mental health facility at any time unless the criteria for his or her retention as an involuntary patient, as set forth in Principle 16, apply, and he or she shall be informed of that right.

Principle 16

Involuntary admission

1. A person may (a) be admitted involuntarily to a mental health facility as a patient; or (b) having already been admitted voluntarily as a patient, be retained as an involuntary patient in the mental health facility if, and only if, a qualified mental health practitioner authorized by law for that purpose determines, in accordance with Principle 4, that person has a mental illness and considers:

- (a) That, because of that mental illness, there is a serious likelihood of immediate or imminent harm to that person or to other persons; or
- (b) That, in the case of a person whose mental illness is severe and whose judgement is impaired, failure to admit or retain that person is likely to lead to a serious deterioration in his or her condition or will prevent the giving of appropriate treatment that can only be given by admission to a mental health facility in accordance with the principle of the least restrictive alternative.

In the case referred to in subparagraph (b), a second such mental health practitioner, independent of the first, should be consulted where possible. If such consultation takes place, the involuntary admission or retention may not take place unless the second mental health practitioner concurs.

2. Involuntary admission or retention shall initially be for a short period as specified by domestic law for observation and preliminary treatment pending review of the admission or retention by the review body. The grounds of the admission shall be communicated to the patient without delay and the fact of the admission and the grounds for it shall also be communicated promptly and in detail to the review body, to the patient's personal representative, if any, and, unless the patient objects, to the patient's family.
3. A mental health facility may receive involuntarily admitted patients only if the facility has been designated to do so by a competent authority prescribed by domestic law.

Principle 17

Review body

1. The review body shall be a judicial or other independent and impartial body established by domestic law and functioning in accordance with procedures laid down by domestic law. It shall, in formulating its decisions, have the assistance of one or more qualified and

independent mental health practitioners and take their advice into account.

2. The review body's initial review, as required by paragraph 2 of Principle 16, of a decision to admit or retain a person as an involuntary patient shall take place as soon as possible after that decision and shall be conducted in accordance with simple and expeditious procedures as specified by domestic law.
3. The review body shall periodically review the cases of involuntary patients at reasonable intervals as specified by domestic law.
4. An involuntary patient may apply to the review body for release or voluntary status, at reasonable intervals as specified by domestic law.
5. At each review, the review body shall consider whether the criteria for involuntary admission set out in paragraph 1 of Principle 16 are still satisfied, and, if not, the patient shall be discharged as an involuntary patient.
6. If at any time the mental health practitioner responsible for the case is satisfied that the conditions for the retention of a person as an involuntary patient are no longer satisfied, he or she shall order the discharge of that person as such a patient.
7. A patient or his personal representative or any interested person shall have the right to appeal to a higher court against a decision that the patient be admitted to, or be retained in, a mental health facility.

Principle 18

Procedural safeguards

1. The patient shall be entitled to choose and appoint a counsel to represent the patient as such, including representation in any complaint procedure or appeal. If the patient does not secure such services, a counsel shall be made available without payment by the patient to the extent that the patient lacks sufficient means to pay.
2. The patient shall also be entitled to the assistance, if necessary, of the services of an interpreter. Where such services are necessary and the patient does not secure them, they shall be made available without

payment by the patient to the extent that the patient lacks sufficient means to pay.

3. The patient and the patient's counsel may request and produce at any hearing an independent mental health report and any other reports and oral, written and other evidence that are relevant and admissible.
4. Copies of the patient's records and any reports and documents to be submitted shall be given to the patient and to the patient's counsel, except in special cases where it is determined that a specific disclosure to the patient would cause serious harm to the patient's health or put at risk the safety of others. As domestic law may provide, any document not given to the patient should, when this can be done in confidence, be given to the patient's personal representative and counsel. When any part of a document is withheld from a patient, the patient or the patient's counsel, if any, shall receive notice of the withholding and the reasons for it and shall be subject to judicial review.
5. The patient and the patient's personal representative and counsel shall be entitled to attend, participate and be heard personally in any hearing.
6. If the patient or the patient's personal representative or counsel requests that a particular person be present at a hearing, that person shall be admitted unless it is determined that the person's presence could cause serious harm to the patient's health or put at risk the safety of others.
7. Any decision whether the hearing or any part of it shall be in public or in private and may be publicly reported shall give full consideration to the patient's own wishes, to the need to respect the privacy of the patient and of other persons and to the need to prevent serious harm to the patient's health or to avoid putting at risk the safety of others.
8. The decision arising out of the hearing and the reasons for it shall be expressed in writing. Copies shall be given to the patient and his or her personal representative and counsel. In deciding whether the decision shall be published in whole or in part, full consideration shall

be given to the patient's own wishes, to the need to respect his or her privacy and that of other persons, to the public interest in the open administration of justice and to the need to prevent serious harm to the patient's health or to avoid putting at risk the safety of others.

Principle 19

Access to information

1. A patient (which term in this Principle includes a former patient) shall be entitled to have access to the information concerning the patient in his or her health and personal records maintained by a mental health facility. This right may be subject to restrictions in order to prevent serious harm to the patient's health and avoid putting at risk the safety of others. As domestic law may provide, any such information not given to the patient should, when this can be done in confidence, be given to the patient's personal representative and counsel. When any of the information is withheld from a patient, the patient or the patient's counsel, if any, shall receive notice of the withholding and the reasons for it and it shall be subject to judicial review.
2. Any written comments by the patient or the patient's personal representative or counsel shall, on request, be inserted in the patient's file.

Principle 20

Criminal offenders

1. This Principle applies to persons serving sentences of imprisonment for criminal offences, or who are otherwise detained in the course of criminal proceedings or investigations against them, and who are determined to have a mental illness or who it is believed may have such an illness.
2. All such persons should receive the best available mental health care as provided in Principle 1. These Principles shall apply to them to the fullest extent possible, with only such limited modifications and exceptions as are necessary in the circumstances. No such

modifications and exceptions shall prejudice the persons' rights under the instruments noted in paragraph 5 of Principle 1.

3. Domestic law may authorize a court or other competent authority, acting on the basis of competent and independent medical advice, to order that such persons be admitted to a mental health facility.
4. Treatment of persons determined to have a mental illness shall in all circumstances be consistent with Principle 11.

Principle 21

Complaints

Every patient and former patient shall have the right to make a complaint through procedures as specified by domestic law.

Principle 22

Monitoring and remedies

States shall ensure that appropriate mechanisms are in force to promote compliance with these Principles, for the inspection of mental health facilities, for the submission, investigation and resolution of complaints and for the institution of appropriate disciplinary or judicial proceedings for professional misconduct or violation of the rights of a patient.

Principle 23

Implementation

1. States should implement these Principles through appropriate legislative, judicial, administrative, educational and other measures, which they shall review periodically.
2. States shall make these Principles widely known by appropriate and active means.

*Principle 24**Scope of principles relating to mental health facilities*

These Principles apply to all persons who are admitted to a mental health facility.

*Principle 25**Saving of existing rights*

There shall be no restriction upon or derogation from any existing rights of patients, including rights recognized in applicable international or domestic law, on the pretext that these Principles do not recognize such rights or that they recognize them to a lesser extent.

Annex 4

Substance use and dependence

Technical paper presented at the
Fifty-second session of the Regional
Committee for the Eastern
Mediterranean and resolution

Executive summary

The public health importance of substance use and dependence is growing from year to year as it is more than a health problem; it is a formidable moral, social and economic challenge with pandemic dimensions. Not a country or place in the world can be certified as “drug free”. As part of one of the most important transit areas of the world for illicit drugs, with many countries experiencing rapid social change and conflict situations, the countries of the Eastern Mediterranean Region are increasingly vulnerable to health, social and economic problems related to substance use and dependence. The trend in substance use among youth (15–24 years) and women is rising. The commonest substances of dependence are cannabis, sedatives, opiates and stimulants. Injecting drug use is a new development with significant public health implications, specifically related to spread of bloodborne infections. The most frequently injected drugs are

opiates. The rate of HIV positive status among injecting drug users increased from 0.16% in 1999 to 3.26% in 2003. Similarly HIV transmission through injecting drug use increased from 2% in 1999 to 13% in 2003.

There is an urgent need to recognize the health impact of substance use and dependence. A number of measures at the level of the individuals, family, community and the health system can be initiated to address the problem. During the past two years, the Regional Office with the advice of the members of the Regional Advisory Panel on the Impact of Drugs (RAPID) has made good progress in formulating a regional response to address this problem. A draft regional strategy to address substance use and dependence has been developed with the following strategic directions: development of national policy with focus on multisectoral actions and networking; increasing understanding of and knowledge about substance use and dependence, especially the extent of the problem, underlying factors, consequences and interventions; development of human resources; increasing accessibility to a wide range of services for psychosocial well-being, prevention, early detection, treatment, rehabilitation and harm reduction integrated within general health system facilities; community-centred actions in all these areas relying on culturally acceptable interventions using religious forums and educational settings and nongovernmental organizations. Member States are recommended to develop national strategies addressing prevention, treatment and harm reduction; ensure access for those affected to health and social support systems; build appropriate capacities in ministries of health; and introduce primary prevention programmes, such as life skills education in schools.

1. Introduction

The public health importance of substance use and dependence is growing from year to year as it is more than a health problem; it is a formidable moral, social and economic challenge with pandemic dimensions. Not a country or place in the world can be certified as “drug free”. As part of one of the most important transit areas of the world for illicit drugs, with many countries experiencing rapid social change and conflict situations, the countries of the Eastern Mediterranean Region are

increasingly vulnerable to health, social and economic problems related to substance use and dependence.

Throughout history, people have used different substances to alter their state of mind. The brewing of alcohol was generally popular among pre-Islamic communities living in Egypt, Iran and the Arabian peninsula [1]. Use of opium was part of traditional culture in a number of countries of the Region. Until recently, most drug use was limited to specific settings according to specific traditions. What is new in recent times is the wider range of drugs abused, the higher potency of the drugs, the more active routes of administration (such as injecting drug use), the lack of social controls against abuse and, consequently, the larger proportion of the population using and becoming dependent on drugs with attendant health and social consequences. In this connection

The purpose of this paper is to:

- review the substance use and dependence situation globally and in the Region with emphasis on a number of alarming trends, such as the increase in the absolute number of drug users, decreasing average age of drug users, increasing number of women drug users and tendency towards more injecting drug use.
- present the recent understanding and the approaches to care and identify areas for countries to take action to address the issue. Such actions include developing national policies, organizing preventive programmes, integrating substance-dependence care programmes into general health care and minimizing the health harms caused by substance use and dependence.

2. Global situation

2.1 Prevalence [2]

Use of alcohol, tobacco, and other controlled substances is increasing, and contributing significantly to the global burden of disease. Tobacco use is growing in developing countries and among women. Currently, 50% of men and 9% of women in developing countries smoke, as compared with 35% of men and 22% of women in industrialized countries. China, in particular, contributes significantly to the epidemic in developing countries. Indeed, the

per capita consumption of cigarettes in Asia is higher than in other parts of the world, with the Americas and eastern Europe following closely behind.

Whereas the level of consumption of alcohol has declined in the past 20 years in industrialized countries, it is increasing in developing countries, especially in the WHO Western Pacific Region, where the annual per capita consumption among adults ranges from 5 to 9 litres of pure alcohol, and also in countries of the former Soviet Union. To a great extent the rise in the rate of alcohol consumption in developing countries is driven by rates in Asian countries. The level of consumption of alcohol is much lower in the WHO African, Eastern Mediterranean and South-East Asia Regions.

According to estimates of the United Nations Office on Drugs and Crime (UNODC), about 200 million people use one type of illicit substance. Cannabis is the most common illicit substance used, followed by amphetamines, cocaine and opioids. Illicit substance use is a predominantly male activity, much more so than cigarette smoking and alcohol consumption. Substance use is also more prevalent among young people than in older age groups. 2.7% of the total global population and 3.9% of people 15 years and above had used cannabis at least once between 2000 and 2001. In many industrialized countries, for example Canada, European countries and the United States of America, more than 2% of youths reported heroin use and almost 5% reported smoking cocaine in their lifetime. Indeed, 8% of youths in western Europe and more than 20% of those in the United States of America have reported using at least one type of illicit substance other than cannabis. Injecting substance use is also a growing phenomenon, with implications for the spread of HIV infection in an increasing number of countries [3].

The global burden of substance use is substantial, accounting for 8.9% of productive life lost annually due to disability and premature mortality, as measured in disability-adjusted life-years (DALYs). The main health burden is due to licit rather than banned substances. Among the ten leading risk factors in terms of avoidable disease burden, tobacco was fourth and alcohol fifth in 2000, and both remain high on the list in the 2010 and 2020 projections. Tobacco and alcohol contributed 4.1% and 4.0%, respectively, to the burden of ill health in 2000, while illicit substances contributed 0.8% [4]. The burdens attributable to tobacco and alcohol are particularly high among

males in industrialized countries (mainly Europe and North America). This is because men in industrialized countries have a long history of significant involvement with tobacco and alcohol and because people in these countries live long enough for substance-related health problems to develop.

2.2 Adverse effects

People use psychoactive substances because they expect a benefit, whether pleasure or the avoidance of pain. But use of psychoactive substances also carries the potential for harm, whether in the short-term or long-term. Harmful effects due to substance use can be divided into four categories: chronic health effects; acute or short-term health effects; acute social problems; and chronic social problems. Examples of chronic health effects include liver cirrhosis (alcohol consumption), lung cancer and emphysema (smoking) and HIV infection (injecting drug use). Acute or short-term biological health effects of drugs such as opioids and alcohol include those caused by overdose, as well as casualties due to the substance's effects on physical coordination, concentration and judgement, in circumstances where these qualities are demanded. Casualties resulting from driving after drinking alcohol or after other drug use feature prominently in this category, but other accidents, suicide and (at least for alcohol) assaults are also included. The third and fourth categories of harmful effects comprise the adverse social consequences of the substance use: acute social problems, such as a sudden break in a relationship or an arrest; and chronic social problems, such as defaults in working life or in family roles [2].

The World Drug Reports published by UNODC provide reliable information about the production, distribution and economic aspects of the drugs of abuse in the Region. The reports highlight the importance of several countries of the Region as major producers of drugs. About 87% of the worldwide opium production is in Afghanistan. Four of the top five cannabis sources are in the Region: Morocco (22%), Pakistan (15%), Afghanistan (13%), Lebanon (8%) [3,5]. Increase in production is complemented by increases in seizures of illicit drugs and violence associated with the illegal traffic of drugs. According to the most recent report of UNODC, the extent of land used for opium cultivation in Afghanistan has decreased in 2005. However, the actual amount of opium produced has not decreased substantially.

2.3 New understanding

A very important development of the past two decades is the greater understanding of the biological, psychological and social origins of drug use and dependence. A WHO publication released in 2004, *Neuroscience of psychoactive substance use and dependence*, provides many answers with evidence from a number of scientific disciplines [2]. It is significant that the newer understanding of the functioning of the brain can now guide substance abuse prevention and treatment programmes.

The book makes a number of important observations summarized below.

- All psychoactive substances can be harmful to health, depending on how they are taken, in which amounts and how frequently.
- Use of psychoactive substances is to be expected because of their pleasurable effects as well as peer pressure and the social context of their use.
- Harm to society is not only caused by individuals with substance dependence. Significant harm also comes from nondependent individuals, stemming from acute intoxication and overdose, and from the form of administration (e.g. through unsafe injections);
- Substance dependence is a complex disorder with biological mechanisms affecting the brain and its capacity to control substance use. It is not only determined by biological and genetic factors, but psychological, social, cultural and environmental factors as well (Box 1).
- Treatment for substance dependence is not only aimed at stopping drug use. It is a therapeutic process that involves behaviour changes, psychosocial interventions and often, the use of substitute psychotropic drugs. Dependence can be treated and managed cost-effectively, saving lives, improving the health of affected individuals and their families, and reducing costs to society.
- One of the main barriers to treatment and care of people with substance dependence and related problems is the stigma and discrimination against them.

Box 1. Risk and protective factors for substance use**Risk factors***Environmental*

- availability of drugs
- poverty
- social change
- peer culture
- occupation
- cultural norms, attitudes
- policies on drugs, tobacco and alcohol

Individual

- genetic disposition
- victim of child abuse
- personality disorders
- family disruption and dependence problems
- poor performance at school
- social deprivation
- depression and suicidal behaviour

Protective factors*Environmental*

- economic situation
- situational control
- social support
- social integration
- positive life events

Individual

- good coping skills
- self-efficacy
- risk perception
- optimism
- health-related behaviour
- ability to resist social pressure
- general health behaviour

Source: [2]

Studies in countries of the Region have shown that people with drug dependence have the highest stigma among a list of physical and mental health conditions [5,6]. This stigma prevents the affected persons from getting care. In a recent study from greater Cairo, only 12% of those dependent on drugs had received treatment at any time [5].

3. Regional situation

3.1 Overview

In 2003–2004, the Regional Office undertook a situation analysis of the substance use and dependence in countries of the Region. A detailed questionnaire on aspects of substance use and dependence was sent to all countries, and responses were received from 19 countries (Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, United Arab Emirates and Yemen). In 13 countries there is an official estimate of the extent of the substance dependence problem in the country. The trend of substance use among youth (15–24 years) is rising in 13 countries, stable in 5 countries and decreasing

in one country. The estimated age of initiating substance use by youth is around 15–18 years in most countries. In 11 countries there is an official estimate of the extent of substance dependence in women. The commonest substances of dependence among women are sedatives, opiates and stimulants.

The average age of persons with substance dependence is 33–44 years. In three countries it is between 20 and 30 years. Policy-makers and the general public are aware of and giving attention to substance dependence relating to opiates (14 countries), cannabis (9 countries), stimulants (6 countries) and sedatives (4 countries). Injecting drug use was reported as a considerable problem in 3 countries, moderate in 7 countries and rare in 5 countries. In 16 countries there is an estimate of the number of injecting drug users, with the numbers ranging from 200 to 137 000. The trend of injecting drug use is rising in 10 countries, stable in 4 countries and decreasing in 4 countries. The most frequently injected drug is opiates in 13 countries.

3.2 Spiritual, social and cultural dimensions and assets

Analysis of the true condition of this Region cannot be complete without consideration of the strong cultural, religious and social assets of the Region. Islam is the religion of 90% of the people of this Region. Christianity is the second religion. Both these religions promote strong family ties, helping those in need and moral and spiritual codes that promote healthy lifestyles. Islam in particular takes a strong stand against use of *khamr*. *They ask you about intoxicants (khamr) and games of chance. Say, "In both of them there lies serious harmfulness (ithm) as well as some benefits to mankind. Yet, their harmfulness outweighs their usefulness. [2:219]. God has prohibited sins which means harm for the individual and the society: My lord has only forbidden indecencies, the inward and the outward, and sin [7:33].*

Contrary to what some people believe, and according to many authentic Islamic narrators, *khamr* refers not only to alcohol but to any substance that clouds or veils the mind and consciousness. The Prophet ﷺ said: "Everything that intoxicates is wine and all kinds of wine are prohibited,"¹ and the Prophet ﷺ also said: "Every intoxicant is forbidden and

¹ Narrated by Muslim and Ibn Majeh on behalf of Ibn Umar.

every narcotic is forbidden and anything that causes drunkenness when taken in quantity is completely forbidden, as is anything that dims reason”.²

Islamic teachings also emphasize the development of a human personality. As the person resorts to alcohol and drugs to escape from problems, while Islam refuses passiveness and escaping challenges. Islam urges individuals to act positively and try to change the bad reality. An ideal Muslim is a responsible human being who always urges decency and opposes what is detestable. The strength of her/his personality is based on two strong characteristics that Islam encourages: patience and belief in predestination:

Surely we will try you with fear and hunger, and loss of property, lives and crops; but [prophet], give good news to those who are steadfast, those who, when afflicted with a calamity say: “surely we belong to God, and to Him we shall return”. These will be given blessings and mercy from their Lord, and it is they who are rightly guided. [2: 155-157]

Another aspect of Islamic teachings which can be used in planning for prevention of substance abuse and care of the substance-dependent rests on the activation of the role played by individuals and the community in providing mental, spiritual and social support to those dependent on substances. Community participation and each individual’s responsibility to assist when another member of the community is in distress are important assets that can be used in the development of programmes. Awareness of this great religious heritage and finding ways of using it in the best way for prevention, care and reduction of harms related to drugs is of great importance in this Region.

In the Eastern Mediterranean Region, as well as many other areas of the world, the breakdown of extended family, unplanned urbanization, internal migration and the appearance of an underclass *nouveaux poor* are among major social causes of substance abuse. However, the fact that the foundation of the family is still strong is an asset. In this respect, any programme for substance abuse treatment and control should have a component of working with and through families, particularly families affected.

² Narrated by Abu Naem in “Ma’refat al sahaba” on behalf of Anas ibn Huthayfah.

3.3 Tobacco use [7]

Tobacco consumption increased by 24% in the Middle East from 1990 to 1997. In fact, the Middle East and Asia are the only two regions in the world where cigarette sales increased during that time period. Half of adult males in the Middle East are smokers. Egypt has the highest number of people that use tobacco, while the highest consumption rate is in Tunisia. This rate rose from 12 billion sticks in 1970 to 52 billion in 1997. The countries of the Gulf Cooperation Council (GCC) as a whole spend US\$ 800 million per year on tobacco.

The number of tobacco shops in Morocco increased from 9600 in 1969 to 20 000 in 2003. In Egypt, the direct annual cost of treating diseases caused by tobacco use is estimated at US\$ 545.5 million. The percentage of cancer deaths among men attributable to tobacco increased from 8.9% in 1974 to 14.85% in 1987. Smoking causes 90% of lung cancer cases in Egypt. There are 30 000 smoking-related deaths per year in countries of the GCC. With lung cancer topping the list of the region's ailments, 15% of the total medical costs in countries of the GCC, where health care is free, go towards the treatment of smoking-related illnesses.

The longer a person has smoked, the higher the risks to health. Those who start to smoke in their teens face the biggest risks. In fact, a person's risk of developing lung cancer is affected more by the length of time as a smoker than by the number of cigarettes smoked daily. Compounding the problem, 85% of smokers in Egypt also smoke sweetened tobacco (*shisha*) in water pipes, a practice that is also very prevalent in the GCC. In the GCC 50% of students aged 14 to 18 years smoke. Around 25% of them started between the ages of 10 and 15 years [8].

3.4 Alcohol consumption

Alcoholic beverages and the problems they engender have been familiar fixtures in human societies since the beginning of recorded history [9]. The brewing of alcohol from dates, grapes, honey and sorghum (*doura*) was generally popular among pre-Islamic communities living in the Arabian peninsula [1]. Temples from ancient Egypt show scenes of wine-making and intoxicated people. Around 200 years ago a major increase in the potential for harmful effects occurred with the discovery of the distillation process,

which increases concentrations of alcohol. At the very beginning of the Islamic era, the drinking of wine was clearly identified as a disruptive social evil and was effectively dealt with. Baasher in 1981 noted “after 14 centuries, the successful Islamic model of alcohol abstention and prohibition still stands out as exceptional, indeed, almost unique in human history”[1]. However, in the past two decades there have been increasing reports of people with alcohol-related health problems seeking health and mental health care from a number of countries of the Region [10]. In 2005, some countries reported a general increase in the use of alcohol and persons dependent on alcohol.

At the global level, increasing number of studies are being published regarding the harmful effects of alcohol, increasing death related to intoxication and the fact that many of the outlets for alcohol consumption are in the deprived neighbourhoods and increasingly more deprived population groups are specifically harmed by alcohol consumption. A series of articles in a recent issue of *International Journal of Epidemiology* are just examples. Other reports strongly dispute the previous publications that attribute useful effects to moderate drinking.[11, 12, 13]

Harmful consumption was discussed at the World Health Assembly in May 2005 and addressed in resolution WHA58.26 on “Public health problems caused by harmful use of alcohol”. In the resolution, the Health Assembly recognized that the patterns, context and overall level of alcohol consumption influence the health of the population as a whole, and that harmful drinking is among the foremost underlying causes of disease, injury, violence, disability, social problems and premature deaths.

Proven strategies to reduce the alcohol-related burden of disease include: institution of a minimum legal age to buy alcohol; government monopoly of retail sales; restrictions on hours/days of sale; restrictions on the density of sales outlets; taxes on alcohol; sobriety checks; lower limits for blood alcohol concentration for drivers; and interventions in health care settings.

WHO is undertaking work in several areas relating to alcohol use and health, including: collecting, compiling and disseminating scientific information on alcohol consumption; preparing global and regional research and policy initiatives on alcohol; and providing support to countries in

promoting identification and management of alcohol use disorders in primary health care.

The fact is that although the magnitude of alcohol-related problems is less in this Region than in others, the trend is upwards and more proactive, comprehensive programmes are needed to deal with this issue. The following can be regarded as necessary first steps:

- development of a reliable data collection and reporting system for provision of more accurate information; such a system should provide better data on manufacturing, import, smuggling and home production of alcohol as well as patterns of consumption and more accurate statistics on the number of alcohol abusers. The experiences of other regions, such as the European Region, can help in this regard.
- regional level consultations to discuss the development of comprehensive, multisectoral programmes addressing particularly the most vulnerable groups and youth;
- inclusion of alcohol abuse on the agenda of the future work of the Regional Advisory Panel on Drug Abuse (RAPID) in order to develop a regional strategy on alcohol abuse.

3.5 *Khat* use

Khat use is prevalent in three countries of the Region, namely Djibouti, Somalia and Yemen. It is variously estimated that in these countries, about 60%–80% of the adults consume *khat* on a daily basis. Its use is growing in popularity, with wide-ranging social and economic effects such as shifting of crop patterns in favour of *khat* growth. A recent study in Hargeisa, Somalia, showed an association between psychotic illness and regular *khat* chewing. Other negative effects include neglect of children and increased poverty, as families spend a disproportionate amount income on buying *khat* [14].

Public health approaches to *khat* use must consider the wide cultural and social acceptance of *khat* in certain countries and harmonize interventions with prevailing social attitudes and practices [15]. At present, systematic studies are needed on the effect of chronic use on health and disease, including among family members of regular users; the association

between *khat* use and patients in psychiatric facilities; and identification of vulnerable groups among users.

3.6 Abuse of medicinal drugs

Among the general population, especially among urban populations, the abuse of licit drugs such as tranquilizers is becoming a public health problem. In contrast to illicit drugs like heroin, abuse of licit drugs is more common among women. Currently, the regulation of drug dispensing is inadequate, and widespread misuse of licit drugs could become a problem in the future. Methods for monitoring the trends in this area need to be developed. An attempt has been initiated in the greater Cairo area in association with UNODC.

3.7 Injecting drug use

Of the many health impacts of the use of illicit drugs, the most important health problem is the spread of HIV/AIDS among injecting drug users. The proportion of AIDS cases attributable to injecting drug use in the Region has increased, from 2.4% of all reported AIDS cases in 1999 to approximately 13% in 2003. This increase reflects a shifting trend from heterosexual transmission to transmission by injecting drug use. In 1999 less than 0.2% of the injecting drug users tested for HIV in the Region were positive. In 2003, the rate of HIV positive tests among injecting drug users reached 7.7%. This is a very worrying public health problem. The issue of the specific harm from injecting drug use in spreading HIV/AIDS needs special attention. Similarly the problem of substance use and dependence in prisons is a matter of concern. A recent study of 611 drug users visiting treatment centres in Teheran found that the prevalence of HIV-1 was 15% [16]. The rates were higher among those who had shared needles in prison. Lack of condom use during sex was also significantly associated with the infection.

The development of needle exchange programmes, such as in the Islamic Republic of Iran, and the activism of former substance users as leaders to bring about change, as in Oman, are positive developments [17,18]. There is a need for closer cooperation between the programmes for control and prevention of AIDS and sexually transmitted diseases and for

mental health to make antiretroviral drugs available to injecting drug users and to develop outreach and public education programmes to reduce social stigma.

Two studies completed in 2004 in Egypt and Libyan Arab Jamahiriya illustrate the dramatic aspects of this problem. In a study of 431 HIV risk-behaviours of problem drug users in greater Cairo, only 98 respondents (23%) had ever been in treatment for drug use [19]. Of these 98, only 11% were currently in therapy. In addition there was a very low rate of HIV testing among the group. In the Libyan Arab Jamahiriya, in the past few years, there has been dramatic increase in injecting drug use related HIV infections as a result of a change in the form of the heroin available and restrictions on availability of needles [20]. These studies highlight the need to monitor the situation on a continuous basis, as changes may occur suddenly due to a variety of factors.

Needle exchange programmes are particularly important in the light of findings that HIV is able to survive in used needles for several days and hepatitis C for several weeks (depending on temperature, humidity and other factors). A public health approach must therefore emphasize the importance of collecting used needles and syringes. The effectiveness of this approach in breaking the chain of transmission of HIV and other bloodborne viruses such as hepatitis is well established [21].

The basis of substitution therapy is harm reduction in the areas of health, family life, occupational status and in decreased crime and legal consequences. For example, once HIV has been introduced into a local community of injecting drug users, there is the possibility of extremely rapid spread. Provision of substitution maintenance of opioid dependence is an effective HIV/AIDS prevention strategy that should be considered for implementation, as soon as possible, for injecting drug users with opioid dependence in communities at risk of HIV/AIDS epidemics. It is for these reasons, provision of substitution maintenance therapy should be integrated with other HIV preventive interventions and services, as well as with those for treatment and care of people living with HIV/AIDS [22-25].

One of the earliest indications of the spread of injecting drug use among drug users was from prisons. In many countries, large numbers of drug users are imprisoned for varying periods of time. In prison, the use of

illicit drugs often continues and becomes the source of spread of blood-borne diseases. It is only recently that prison-based programmes for drug abuse in terms of treatment and harm reduction have been introduced. This is a important area for future work. A recent study from Teheran, Islamic Republic of Iran showed a relationship between HIV-1 infection and the length of incarceration among participants who used injecting drugs [16]. The prevalence of HIV infection was 5% among those never in prison, 15% among those with less than 6 months in prison, and 31% among those with more than 6 months of prison stay. Prisons are extremely high-risk environments for HIV transmission because of overcrowding, poor nutrition, limited access to health care, illicit drug use and unsafe injecting practices, unprotected sex and tattooing. Many of the people in prisons come from marginalized populations, such as injecting drug users, who are already at elevated risk of HIV infection. In most cases, high rates of HIV infection in prisons are linked to the sharing of injecting equipment and to unprotected sex in prison. Syringe sharing rates are invariably higher in prisons than among injecting drug users outside prison.

Evidence is increasing that HIV transmission can be reduced in prisons [23]. Since the early 1990s, various countries have introduced prevention programmes in prisons. Such programmes usually include: information, education and communication on HIV/AIDS; voluntary counselling and testing; distribution of condoms; use of bleach or other disinfectants; exchange of needles and syringes; and substitution therapy. Additional components of a harm reduction programme with a significant potential to reduce individual risk behaviour associated with drug injection and other risk behaviour are treatment and care related to HIV/AIDS, hepatitis and tuberculosis, including access to highly active antiretroviral therapy.

There are strong reasons for prison services to consider introducing substitution therapy. These include: problems in managing regimens and difficulties for staff that arise during withdrawal, including drug smuggling and acts of violence toward staff and other prisoners; the growing problem of suicide and self-harm during the period of withdrawal among imprisoned drug users and drug dependent people; the importance of equity in provision between prisons and communities; the drive to provide clinical services at a

standard equivalent to internationally agreed best practice; the risk of a fatal overdose in the first few days following release from prison, especially for short-term prisoners. Substitution therapy programmes report several valuable benefits, including decreased use of other drugs, decreased crime, decreased mortality, less HIV transmission, less hepatitis C transmission and marked improvements in the health of drug users. This treatment has been shown to work and to be cost-effective [24,25].

4. Regional efforts to address substance use

In 1999, an intercountry consultation was organized for development of guidelines for demand reduction in substance abuse with special emphasis in injecting drug use. Experts recommended a balance between supply reduction and demand reduction and prevention of drug abuse. Recognizing the growing problem of injecting drug users, the Regional Office set up the Regional Advisory Panel on Impact of Drugs (RAPID) in September 2002 to: perform an in-depth study of different available data on substance abuse, with particular emphasis on injecting drug use and its related health consequences including HIV/AIDS; support and advise on creating a unified data collection system for the Region; and advise on the development of a regional strategy on all health-related aspects of substance abuse, including demand and harm reduction interventions.

During the past two years, the Regional Office with the advice of the members of RAPID, has made progress in understanding the regional situation regarding substance use and dependence. Following the first meeting of RAPID, a survey of the substance use situation in Member States was undertaken.

Innovative approaches to prevention, treatment and rehabilitation of individuals with substance dependence have been initiated by a number of countries. In Pakistan, the school mental health programme started in the 1980s had an anti-drug message “smoking is injurious to health”. In recent years comprehensive HIV/AIDS prevention and care programme for injecting drug users was developed in Kermansah province, Islamic Republic of Iran under the name “triangular clinic”, to signify the synthesis of treatment, reduction of harm and care [18]. The initial success of this approach led to the extension of the clinics to prisons and to 21 other

provinces. The effort has resulted in a significant reduction of new HIV infections. The key elements are the political commitment, coordinated activities of a number of organizations and a dedicated and skilled team of carers.

In the area of prevention of drug abuse in school students, Egypt is conducting a major initiative. The National Project for Drug Abuse Demand Reduction among youth has been in operation since April 2001. The strength of the project is the active participation of the youth in school settings and out of school settings. The project is under implementation of 100 preparatory and secondary schools and 30 youth centres and clubs and includes a media campaign and the strengthening the capacity of 30 nongovernmental organizations to address the problem. In 2005, the programme was further extended to cover an additional 150 schools. As part of another initiative, a National Trust Fund provides support for delivery of services, including a hot-line for drug abuse with linkages to the different treatment and rehabilitation centres. In Morocco, there are active programmes with preventive interventions for street children.

A number of countries have set up national committees on drug abuse, such as the National Commission on Drugs in Morocco, National Project for Drug Abuse Demand Reduction in Egypt and National Harm Reduction Committee in the Islamic Republic of Iran. Several countries have recently opened new modern specialized treatment and rehabilitation centres (Bahrain, Kuwait, Saudi Arabia).

5. Strategic issues

There are a few questions that often come to mind when considering substance use and dependence. What is it that drives people to seek solace from substances of abuse? How is it that the substance of abuse becomes so much a part of the user that it dominates the user's life? Why are young people more at risk? Why is relapse so frequent after periods of abstinence? How is it that women use substances of abuse less frequently than men? What are the environmental /social risk factors? How can we increase the resilience of individuals to avoid seeking solace from substances of abuse in times of crisis? How do we balance the ethical aspects of harmonizing the

rights of the individual with that the needs of the society in choosing options to address substance use and dependence?

One very striking aspect of substance use and dependence is the importance of youth. Efforts must be focused on reducing the demand among young people. Work with young people is in progress in a number of countries such as Egypt and the Islamic Republic of Iran. There are many reasons that working with this age group is important. First, providing education and skills to cope with the developmental needs of young people can reduce the demand for substance use and, thus, dependence. Second, the involvement of young people can have a larger effect on society, as they bring fresh ideas and energy to the community. Third, the skills that are shared with young people to address substance use also have beneficial effects in reducing other behaviour-related problems such as suicide, violence and risk taking behaviour. It is well known that school-based programmes, especially life-skills education programmes, are effective in preventing substance use and promoting mental health. There is an urgent need for life-skills education to become a regular part of the school curriculum.

Religion and spirituality have an important role in matters of health [26]. A recent report from Beirut on the inverse association between spirituality and smoking behaviour among new students at the university, has important implications [27]. Religion and spirituality have a special place in the hearts and minds of the people of the Region. It is important to find ways and means of maximally utilizing the religious beliefs and practices both to help prevent the problem of substance use and in the treatment and rehabilitation of people dependent on substances.

Transcending belief systems, such as religious conviction, can strengthen the personality and enable people to liberate themselves from the need to passively escape into the artificial and deluding world of intoxicants like alcohol or drugs. This is particularly true for Islam which opposes using any substance which can cloud the consciousness. Religious, and particularly Islamic, practices, and situations that unite a people in a conviction, strengthen self control, emotional awareness and stability and a general anti-drug attitude. For example, the statistics of drug abuse at different periods in Palestine show a decline during the peak of resistance (*intifadah*). A recent

study on protective factors against substance abuse has shown that two factors have a clear effect on decreasing the monthly use of alcohol, marijuana and cigarettes in adolescents: promoting the place of health in individuals' value systems and spirituality [28].

There is an urgent need to recognize the health consequences of substance use and dependence. Substance use and dependence cannot be seen only as a law and order problem. Supply reduction alone has not been successful in any of the countries. Legal efforts must be continued with medical interventions. The health interventions have to be directed at many levels. The needs of the vulnerable group of youth, especially during adolescence, should be given priority. More efforts must be directed at early identification, treatment and rehabilitation. Harm reduction strategies are needed to reduce the impact of substance use on the individual and community. There is also need for addressing the larger social situations like poverty, social deprivation, marginalization and conflict situations to reduce the use of substances. Programmes to address substance use must be multisectoral in nature, with the key sectors being health, education, agriculture, labour, police and social welfare. There is also urgent need for monitoring the trends of substance use in the different populations.

The recent regional survey brought forth two important points. The first point, which is positive, is that a high level of recognition is now being given by most countries to the problem, evident in the creation of professional units, passing of legislation and development of different interventions. The second point is that there is very little factual information about the nature, magnitude, consequences, outcome of interventions and cost of the problem in the countries. This type of information is crucial for proper planning.

6. Strategic directions

A regional strategy on substance use and dependence has been under development by the Regional Advisory Panel on the Impact of Drugs (RAPID) during the past three years. During 2003–2004, the substance use situation in the Region was reviewed through a questionnaire sent to all countries. Based on the findings, a draft regional strategy was finalized in June 2005. The strategic directions identified in the strategy are:

- Developing national policies on substance use and dependence;
- Developing effective coordination mechanisms for implementation of national policies;
- Developing mechanisms to increase understanding and knowledge of the substance use and dependence situation within each country and the underlying factors, the harmful consequences and interventions currently provided;
- Development of a wide variety of human resources;
- Increasing access to a range of health and social care services in the community for the provision of treatment, rehabilitation, aftercare and harm reduction, along with integration of services with general health care;
- Promoting psychosocial well-being and prevention of substance use and dependence;
- Promoting multisectoral action and networking.

WHO has an important role to play in the development of substance use and dependence policies, programmes and services in countries. This role includes advocacy and policy support; monitoring and surveillance; capacity building through training, developing guidelines and establishing collaborating centres and expert networks; research, documentation and dissemination of information; development of indicators for monitoring substance use and dependence in the countries; partnership establishment (United Nations agencies, nongovernmental organizations, community-level organizations) and fundraising; and development of a code of ethics related to this field.

7. Conclusions

The dynamics of substance use and dependence include social, economic, environmental, political, cultural and religious dimensions. The growing problem both in terms of the numbers of people involved as well as the impact on the health of the individuals and communities makes substance use a public health priority.

Interventions have to address—at the level of health promotion in general and mental health in particular—prevention in the groups at risk (such as adolescents), early recognition, and care and rehabilitation of people dependent on substances. The interventions cannot be restricted to the health system only; the other sectors like the education sector, the legal system, the media all are important.

In the countries of the Region, one of the most important needs is to document the changing pattern of substance use and dependence and the public health consequences. In addition, there is need to review the many social attitudes, practices and positions to recognize the changing aspects of substance use and dependence. The problem has to be seen from a multisectoral perspective and the solutions have to be also from a number of sectors. Health interventions are an important part of the effort to prevent substance use and dependence and treatment/rehabilitation. There is an added urgency in the countries of the Region due to the large numbers of injecting drug users and increasing spread of HIV/AIDS. There are a number of initiatives that can be taken up for effective action.

8. Recommendations

Member States

1. Develop national strategic plans addressing prevention, treatment and harm reduction in relation to substance use, along with a mechanism to monitor trends and associated consequences of substance use.
2. Ensure access for the affected population to health and social support systems in order to enhance early identification, treatment, harm reduction and rehabilitation, and promote quality of life and social function.
3. Build appropriate capacities in ministries of health and provide support for development of “centres of excellence” in the fields of training, research, and service provision for substance use and dependence.
4. Introduce primary prevention programmes, such as life-skills education in schools.

WHO

5. Enhance collaboration and coordination with other international organizations to harmonize messages about substance use and its harms and to avoid duplication of efforts.
6. Actively support the efforts of Member States to formulate and implement programmes to control substance use and dependence, and establish or strengthen mechanisms for exchange of experience between countries.
7. Continue to develop indicators and systems for monitoring and initiate the development of an information system and focused research to monitor the changing trends in substance use.

References

1. Baasher T. The use of drugs in the Islamic world. *British journal of addiction*, 1981, 26:233–43.
2. Neuroscience of psychoactive substance use and dependence. Geneva, World Health Organization, 2004.
3. *World drug report 2005*. New York, United Nations Office on Drugs and Crime, 2005.
4. World health report 2002: Reducing risks, promoting healthy life. Geneva, World Health Organization, 2002.
5. *World drug report 2004*. New York, United Nations Office on Drugs and Crime, 2004.
6. Room R et al. Cross-cultural views on stigma, valuation, parity and societal values towards disability. In: Üstün TB et al, eds. *Disability and culture: universalism and diversity*. Seattle, WA, Hogrefe and Huber, 2001.
7. Tobacco control country profiles for the Eastern Mediterranean Region, Cairo, WHO Regional Office for the Eastern Mediterranean Region, 2003.
8. Al-Badah A. Controlling the tobacco epidemic in the Gulf Cooperation Council (Arabic). Kuwait, GCC States Publications, 2001.

9. Room R, Babor T, Rehm J. Alcohol and public health. *The Lancet*, 2005, 365:519–30.
10. *Global status report on alcohol*. Geneva, World Health Organization, 1999.
11. Mäkelä P et al. Temporal variation in deaths related to alcohol intoxication and drinking. *International Journal of Epidemiology*, 2005, 34:765–771.
12. Pollack CE et al. Neighbourhood deprivation and alcohol consumption: does the availability of alcohol play a role? *International Journal of Epidemiology*, 2005, 34:772–780.
13. Nilssen O et al. Alcohol consumption and its relation to risk factors for cardiovascular disease in the north-west of Russia: the Arkhanglesk study. *International Journal of Epidemiology*, 2005, 34:781–788.
14. Odenwald M et al. *Khat* use as risk factor for psychotic disorders: a cross-sectional and case control study in Somalia. *BMC medicine*, 2005, 3:1–10.
15. Baasher T. The use of *khat*: a stimulant with regional distribution. In: Edwards G, Arif A, eds. *Drug problems in the socio-cultural context: A basis for policies and programme planning*. Geneva, World Health Organization, 1980.
16. Zamami S et al. Prevalence of and factors associated with HIV-1 infection among drug users visiting treatment centers in Teheran, Islamic Republic of Iran. *AIDS*, 2005, 19 (7):709–16.
17. Effectiveness of community based outreach in preventing HIV/AIDS among injecting drug users, Geneva, World Health Organization, 2004.
18. Best practice in HIV/AIDS prevention and care for injecting drug users. The Triangular Clinic in Kermanshah, Islamic Republic of Iran. Cairo, WHO Regional Office for the Eastern Mediterranean, 2004 (WHO-EM/STD/052/E).
19. HIV risk-behaviours of problem drug users in Greater Cairo. Cairo, United Nations Office on Drugs and Crime, 2004.
20. UNODC. *Drug use and HIV/AIDS in Libya: a multi-method study*. Presentation to the third meeting of the WHO Regional Advisory Panel on Impacts of Drug Abuse, Cairo, Egypt, 20–23 September 2004.

21. Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users. Geneva, World Health Organization, 2004.
22. Kerr T et al. Opioid substitution and HIV/AIDS treatment and prevention. *The Lancet*, 2004, 364:1918–9.
23. *Policy brief: Reduction of HIV transmission in prisons*, Geneva, World Health Organization, 2004 (WHO/HIV/2004.05).
24. Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention. Geneva, World Health Organization, 2004 (WHO/UNODC/UNAIDS position paper).
25. Effectiveness of drug dependence treatment in preventing HIV among injecting drug users. Geneva, World Health Organization, 2005.
26. Chatters LM. Religion and health: Public health research and practice. *Annual review of public health*, 2000, 21:335–67.
27. Affifi R, Khawaja M, Salem MT. Religious identity and smoking behaviour among adolescents: evidence from entering students at the American University of Beirut (Unpublished document, 2004).
28. Ritt-Olson A et al. The protective influence of spirituality and “health-as-a-value” against monthly substance use among adolescents varying in risk. *Journal of adolescent health*, 2004, 34:192–199.

Resolution EM/RC52/R.5: Substance use and dependence

The Regional Committee,

Having reviewed the technical paper on substance use and dependence;³

Recalling resolutions WHA 32.40 on the development of the WHO programme on alcohol-related problems, WHA36.12 on alcohol consumption and alcohol-related problems: development of national policies and programmes, WHA42.20 on prevention and control of drug and alcohol abuse, WHA58.26 on public health problems caused by harmful use of alcohol, and EM/RC40/R.9 on abuse of narcotics and psychoactive drugs;

Recalling also The World Health Reports of 2001 and 2002, which indicate that the disease burden and health consequences of substance abuse and dependence are significant;^{4 5}

Alarmed by the new trends and extent of the public health problems associated with substance use and dependence, particularly among young people and women, in Member States of the Region;

Concerned at the rise in injecting drug use in the Region, especially for its serious health consequences that threaten to spread human immunodeficiency virus (HIV) and other blood-borne infections;

Concerned also at the economic loss to society resulting from substance use and dependence;

Noting the growing evidence of the effectiveness of strategies and measures to treat and reduce harm among substance users;

Recognizing that a number of countries in the Region are major producers of opium, cannabis and khat;

Stressing the value that all religions, and, with particular reference to this region, Islam attach to saving lives through prohibiting the use and abuse of alcohol and other mind-altering substances;

³ Document No. EM/RC52/5

⁴ *The world health report 2001. Mental health: new understanding, new hope.* Geneva, World Health Organization, 2001.

⁵ *The world health report 2002. Reducing risks, promoting healthy life.* Geneva, World Health Organization, 2002

1. URGES Member States to:

- 1.1 Establish or strengthen a functional multisectoral national coordinating body to address all issues related to substance use and dependence;
- 1.2 Make a wide range of approaches and interventions available to address different aspects of primary prevention, through programmes like life skills education, and different levels of care, rehabilitation and harm reduction, with major reliance on community-based mechanisms and not only hospital-based services;
- 1.3 Establish an information system and undertake focused research to monitor the changing trends in substance use and dependence and alcohol consumption, and foster the building of an evidence base;
- 1.4 Address alcohol consumption as a potentially major public health issue and develop mechanisms for monitoring production, import and smuggling and ways to control consumption and deal with the health hazards of alcohol;
- 1.5 Enact national legislation that considers the substance-dependent as patients not criminals and toughens the punishment of drug dealers;
- 1.6 Stimulate the religious self-deterrent through explaining the religious ruling against alcohol and drug use, and applying religious teachings in control and prevention;

2. REQUESTS the Regional Director to:

- 2.1 Support the efforts of Member States to formulate national policies and strategies and implement sustainable programmes to control substance use and dependence including alcohol;
- 2.2 Develop programmatic linkages with the global programmes dealing with these matters across the United Nations system (UNODC, UNAIDS), with other organizations, and between Member States;
- 2.3 Convene a regional consultation to consider the magnitude of the problem of use of khat in the Region, conduct an evidence-based

study of its impact on the individual and the community, and propose suitable solutions to remedy this problem;

- 2.4 Report to the Regional Committee on progress in implementation of this resolution at its meeting in 2007.

Annex 5

Prevention of mental, neurological and psychosocial disorders

List of interventions that can be directed against each problem area	
Problem	Intervention
Mental retardation	Prenatal and perinatal care Immunization Family planning Epilepsy control Nutrition Day care Accident prevention Family support Teaching of parenting skills Better long-term care institutions Recognition and care of sensory and motor handicaps
Acquired lesions of the central nervous system	Treatment of hypertension and infection Epilepsy control Control of abuse of certain substances Accident prevention
Peripheral neuropathy	Accident prevention Recognition and care of sensory and motor handicaps Health education Control of abuse of certain substances

List of interventions that can be directed against each problem area	
Psychoses	Treatment of depression and schizophrenia Family support Better long-term care institutions Dementia control Treatment of anxiety, depression, and infection Support services
Epilepsy	Prenatal and perinatal care Immunization Treatment Accident prevention Health education
Emotional and conduct disorders	Family planning Health education Role of teacher Teaching of parenting skills Day care Primary health care
Abuse of certain substances	Primary health care Prevention of iatrogeny Health education
Conditions of life that lead to disease	Psychosocial care Crisis intervention Control of abuse of certain substances Health education Teaching of parenting skills
Violence	Accident prevention Control of abuse of certain substances Health education Teaching of parenting skills
Excessive risk-taking behaviour in young people	Health education Support services Teaching of parenting skills Crisis intervention Accident prevention
Family breakdown	Day care Teaching of parenting skills Support services

The role of the media, cultural and religious influences, non-governmental organizations and intersectoral collaboration and government action apply in greater or lesser degree to all patients.

Source: *Prevention of mental, neurological and psychosocial disorders*. Geneva, WHO, 1988.

Annex 6

Regional meetings relating to mental health 1973–2005

1. Interregional seminar on the organisation of mental health services, Addis Ababa, Ethiopia, 27 November – 4 December 1973.
2. Group meeting on mental health legislation, Cairo, Egypt, June 1976.
3. Third Coordination Group for the WHO mental health programme, Alexandria, Egypt, 10-14 September 1979.
4. Scientific working group meeting on mental health research, Karachi, Pakistan, June 1981.
5. Research in behavioural sciences – EM/Advisory Committee meeting, Limassol, Cyprus, 18-20 April 1983.
6. Regional intercountry group meeting on the development of mental health programme, Amman, Jordan, 24-28 September 1983.
7. Intercountry meeting on the health, social and economic aspects of Khat, Mogadishu, Somalia, October 1983.
8. Regional intercountry meeting on national programmes of mental health, Damascus, Syrian Arab Republic, 2-6 November 1985.
9. Consultation group meeting on application of behavioural sciences in health services, Alexandria, Egypt, September 1985.
10. Intercountry workshop on training in mental health in primary health care, Islamabad, Pakistan, 7-12 March 1987.
11. Regional intercountry meeting on the progress of national programmes of mental health, Isfahan, Islamic Republic of Iran, 12-16 March 1989.

12. The second intercountry meeting on progress achieved in national mental health programmes, Nicosia, Cyprus, 16-20 July 1990.
13. Consultation on school mental health programmes, Islamabad, Pakistan, 14-17 November 1993.
14. Intercountry meeting on the progress of the national mental health programmes in the Eastern Mediterranean Region, Casablanca, Morocco, May 1995.
15. Consultation on Mental Health Legislation, Alexandria, Egypt, 1-2 May 1996.
16. Intercountry meeting on needs assessment, Tehran, Islamic Republic of Iran, September 1997.
17. Mental Health Legislation in different Law traditions including Islamic Law, Kuwait, October 1997 (In collaboration with Islamic Association for Medical Sciences).
18. Intercountry consultation for development of guidelines for demand reduction in substance abuse with special emphasis in injecting drug use, Beirut, Lebanon, 25-27, November 1999.
19. Intercountry meeting on evaluation of the National Mental Health Programmes, Alexandria, Egypt, December 2000.
20. First meeting of the Regional Advisory Panel on impacts of drug abuse(RAPID), Cairo, Egypt, 23-26 September 2002.
21. Consultation on mental health and rehabilitation of psychiatric services in post-conflict and complex emergency countries, Cairo, Egypt, 28-30 July 2003.
22. Second meeting of the Regional Advisory Panel on impacts of drug abuse(RAPID), Tehran, I. R. Iran, 1-4 December 2003.
23. Third meeting of the Regional Advisory Panel on impacts of drug abuse(RAPID), Cairo, Egypt, 20-23 September 2004.
24. Meeting on the role of religion and spirituality for the prevention of substance abuse and rehabilitation of drug users, Cairo, Egypt 15 December 2004.
25. Consultation on Life Skills Education, Cairo, Egypt, 19-20 June 2005.
26. Fourth meeting of the Regional Advisory Panel on impacts of drug abuse (RAPID), Cairo, Egypt, 27-28 June 2005.

Annex 7

Suggested tasks for different categories of personnel

The following are the different categories of personnel from the health and related sectors and the mental health activities that they can carry out.

1. Health guide

- Mental health education to community using different means like lectures in mosques, schools and village community gatherings.
- Educating and supporting the family and community care of mentally ill patients, helping to remove the stigma of mental illnesses and the importance of regular medication.
- Identification of patients with major mental health problems like psychosis, fits, and mental retardation.
- Referral of patients to health unit/centre, district centre and keeping records of old and new patients.
- First aid for acute psychiatric problems.
- Prevention of mental disorders and promotion of mental health.

2. Medical assistant

- Advising health team about traditions and beliefs in the community.
- Facilitating the role of the community health guide, e.g. by organising village meetings.
- Identification of people in need of mental health care.

- Assistance in the re-integration of the mentally ill in the community, and
- Collaboration with health personnel to promote mental health and psychosocial development.

3. Preschool child workers

- Early recognition of preschool children with problems.
- Provide first aid in emergencies.
- Use mental health promotion activities in the day care facility by plan and stimulation.
- Guidance to parents about parenting skills and referral of problem children.

4. School teacher

- Early identification of childhood problems and referral to health facility.
- First aid in emergencies.
- Provide mental health education to children regarding accident prevention, risk-taking behaviour and drug abuse, along with methods to increase self-esteem.
- Parental counseling about adolescence and its management.
- Early detection of sensorial defects and referral for help.
- Contributing by educational activities, to the promotion of positive attitude towards the mentally ill.

5. Police

- Recognition of acute mental disorders and undertaking of necessary action to protect the mentally ill, his family and his fellow citizens.
- Provision of first aid in specified problems. (e.g. an epileptic fit, acute excitement, threatened suicide)

6. General practitioner/Medical graduate

(Trained for two weeks in mental health and working at district centre)

- Recognition, diagnosis and treatment of commonly occurring psychiatric problems in the clinics and community.
- Referral to governorate or central hospital difficult cases with information and treatment details.
- Maintenance of records of all treatment and patients of the area.
- Provide in-service training to medical assistants and health guides.
- Supervision and support of medical assistants and health guides.
- Recognition of the health policy in the country and the national programme of mental health.

7. General practitioner

(Trained for two months in mental health and working at governorate hospitals)

- Recognition, diagnosis and treatment of all mental disorders (outpatient and inpatient).
- Management of cases with treatment with drugs, electroconvulsive therapy (ECT) and supportive psychotherapy.
- Maintenance of proper records of all receiving care.
- Support of all cases referred by the district and health centres and feedback for follow-up.
- Referral of difficult cases to central hospital with adequate details.
- Organisation of training regularly for the new medical doctors, medical assistants and health guides.
- To initiate preventive programmes of primary level involving teachers, murabbias and community leaders.
- Supervision and support of health guides, medical assistants, and medical officers of the area by periodic field visits.

8. Clinical psychologist

- Development of psychological tests.
- Knowledge about public health principles in mental health.
- Activities to promote mental health through health workers, voluntary agencies, teachers, police and village leaders.
- Mental health research of public health priority mental disorders.
- Development of teaching and training materials and assessment methods.

9. Specialist social workers

- Supportive activities and vocational help to the patients and their families.
- Development of teaching and training materials for different categories of personnel.
- Activities to promote mental health through health workers, voluntary agencies, teachers, police and village leaders.
- Knowledge of public health principles in mental health care.
- Social assessment of outpatients and inpatients and visits to homes and workplaces.

10. Psychiatric nurse

- Training of health personnel in task-oriented mental health care.
- Strengthening of the family supports and acceptance of the mentally ill by the families.
- Supervision and support to health and personnel of the other sectors in mental health care.

11. Psychiatrist at central hospital

- Correct diagnosis and treatment of mental disorders attending the outpatient department and those referred by the peripheral units.
- Inpatient treatment of patients requiring intensive care and observation for short periods of time (prolonged and custodial care will be discouraged).
- Annual maintenance and analysis of the records and feedback to the peripheral units and the Ministry of Health.
- Initiation of preventive techniques and develop mechanisms for mental health promotion.
- Training to general practitioners, medical assistants, health guides and develop manuals and other teaching aids.
- Initiate research into problems of relevance to programme implementation.
- Evaluation of effectiveness of the different training programmes.
- Support and supervision of the different personnel.

Annex 8

Essential neuropsychiatric drugs for general health care¹

Conditions	Level of medical personnel required to prescribe drugs			
	Psychiatric specialist	More than 6 years' training e.g. general physician	2-3 years training, e.g. medical assistant	<1 year training e.g. village health worker
Neurotic disorders				
Anxiety	DZP ¹			
Depression	IMI ² AMI	IMI	IMI	
Psychotic disorders				
Schizophrenia	CPZ FPZ BP TPZ ⁴	CPZ FPZ BP TPZ	CPZ FPZ BP	CPZ ³
Other	LC HAL HAL inj			
Epilepsy				
Grand mal	PB PHT	PB PHT	PB	(PB)
Other	CBZ ESM VA			
Emergencies				
Acute psychosis	CPZ CPZ	CPZ CPZ inj	CPZ CPZ inj	
Acute alcohol withdrawal	DZP inj	DZP inj		
Status epilepticus	DZP inj	DZP inj		
Other disorders				
Drug/alcohol withdrawal	CPZ	CPZ		
Insomnia	DZP	DZP		

¹ Diazepam is often overprescribed and careful training in its rational use is mandatory.

² Imipramine and amitriptyline are nearly equivalent. Although the latter is included in the WHO Model List of Essential Drugs, imipramine is recommended because of its lower cost and more general availability.

³ In several countries programmes, village health workers have been trained to follow up on treatment with chlorpromazine initiated at a higher level.

⁴ It is recommended that trifluoperazine, although not on the WHO Model List of Essential Drugs, should also be available.

Key: AMI Amitriptyline ESM Ethosuximide PB Phenobarbital
 BP Biperiden FPZ Fluphenazine PHT Phenytoin
 CBZ Carbamazepine HAL Haloperidol TPZ Trifluoperazine
 CPZ Chlorpromazine IMI Imipramine VA Valproic acid
 DZP Diazepam LC Lithium carbonate inj injection

¹ Source: *Appropriate neuropsychiatric drugs for primary health care*, Alexandria, WHO Regional Office for the Eastern Mediterranean, 1995 (EMRO Technical Publications Series 21).

Annex 9

Training methods

The various methods which have been tried and whose efficacy in imparting the required skills are given below.

1. The lecture

The lecture is a time-honoured method of teaching. In spite of all its faults, it is still an economical and useful method in the hands of a good teacher. For the training of primary care physicians (PCPs), the following points should be conveyed to the trainers:

- PCPs should not be treated as undergraduate students and are expected to listen and make notes during long didactic lectures. Nor should they be treated as postgraduate students of psychiatry preparing for their final examination who are to be told all about the latest theories of the aetiology of mental disorders and the newest drugs in the market. Such lectures may be easy to deliver by psychiatrists but they are largely a waste of time for PCPS.
- Each lecture should be prepared carefully, keeping in view the need of the PCP, linking it with the tasks which are required of him in his daily practice.
- It is always useful before the start of the lecture to ask a few general questions from the PCPs, related to the topic of the lecture, to assess their existing knowledge, and their general style of handling such problems in their practice.

- The lecture should not be long – almost never beyond 40 minutes. At the end of the lecture, sufficient time should be left for a question-and-answer session, which is often the most important part of the exercise.
- Appropriate teaching aids, like a blackboard, chart or overhead projector, should be used to illustrate the important points of the lecture. Slides or transparencies, if used, should be specially prepared for PCPs (and not simply taken from the pool of slides for medical students). It should be remembered that too many slides in a lecture, with lights going on and off, reduce communication, which is essential for a good lecture.

2. Case demonstration

Next to the lecture, perhaps the most common method of teaching is case demonstration. It is an extremely useful and important method. Here again, the essential part is that patients should be selected very carefully. Patients with gross psychotic symptoms are easy to find in psychiatric services but these are not the best patients to teach PCPs. As far as possible, patients who are commonly seen by PCPs in their daily practice should be selected. At the same time, symptoms and psychopathology should be sufficiently clear and obvious for demonstration.

3. Training in interview methods

Perhaps the most important new skill which PCPs should acquire during these training courses is the technique of psychiatric interview: in short, how to listen and how to talk to the patient in day-to-day practice. A good interview with a patient can be utilized for various purposes – for obtaining history, for assessing mental state or for providing counseling. All these three elements often exist together in the average doctor-patient encounter in general practice.

Interview training can be provided in various ways. In the absence of a television or other audio-visual facility, one simple technique is to conduct a live interview in a group setting. In a small group, a patient (or a role player) is invited and interviewed by one physician in his usual style. The teacher and other participants listen attentively, observe the behaviour of the

interviewing doctor and patients, and take notes, but do not interrupt in any way. After about 10-15 minutes, the patient withdraws. After the interview, participants make observations on what they have just witnessed, e.g. “doctor was too dominant and did not let the patient talk” or “after mentioning chest pain, patient referred to work problems; this was not followed up by interviewing doctor” and so on. If necessary, the patient is called back to demonstrate the points which were missed by the interviewing doctor. Such an exercise is usually followed by a demonstration in which the teacher interviews another patient, in front of the group, and which is again followed by analysis and discussion by the group.

More important than the content of the interview, the trainees should learn the art of interviewing – how to make people comfortable, how to make them relax and talk about their personal problems, how to pick up hints about underlying psychological and social problems, etc.

In some psychiatric centres, a one-way mirror-screen is used for interview training, especially for psychotherapy. However, for brief interview training for PCPs, there is generally not much difficulty in a live interview in a small group setting. It is one of the simplest and best techniques of mental health training.

4. Case conference

In this classical teaching exercise, the patient is examined by one or two students and then presented to the teacher in a group. It is a useful exercise but, since the teacher does not watch the student taking history and conducting examinations, many of the deficiencies in interview skills remain unexposed. It should be combined with the exercise of interview training as mentioned above.

5. Criss-cross discussion

This is a very useful low-cost technology in which the PCPs present their problem-patient's history in a group setting with a trainer acting as a resource person. They are encouraged to describe patients they have seen with problems similar to those about which they have been taught. The teacher is passive, but provides information to the group on request, and

corrects errors if necessary. Other members of the group interact by citing their experiences and difficulties with similar problems. Such discussions become very animated and the method has been called “criss-cross fire” by those experienced in it.

6. Role-playing

As is well known, psychiatric patients are often difficult to have when needed for teaching, e.g. they have already recovered from their illness, they are too disturbed to be shown in a group, they do not speak the right language or simply cannot keep the appointment. A good alternative technique, which has become quite popular in recent years, is “role-playing”. In this training method, another person, e.g. a staff member (a doctor, nurse or social worker) acts or plays the role of a patient. The advantage is obvious. The “role player” can be tutored to present specific symptoms and history, which heightens the effect of a short training interview. With a little practice, role-playing can be made into a very useful addition to training of PCPs and it can be used in almost all settings.

7. Use of audiotapes

Audiotapes are now available in every country. These can be useful employed in training, especially for demonstrating a sample of patient’s talk or conversation between patient and doctor. Their use is particularly helpful when the patient’s symptoms and improvement are being demonstrated over a length of time. The PCP can also make a recording of his own interview of his selected patients in his practice which can be brought for group discussion.

8. Use of television and videotapes

The use of television and videotapes has revolutionized modern teaching and training techniques. In recent years, television sets, video-recording and projecting machines have become widely available in many countries of the Region. Many universities and teaching centres have

developed special studios and have trained technicians to prepare technical video films for teaching.

Video films and television are very well suited for training of PCPs. With a simple videocamera, interviews of patient by PCPs can be recorded in their own clinic settings. These videotapes can be replayed later in the group sessions. The great advantage of the videotape is that it can be stopped at any point or a sequence repeated when required, till the teacher has clarified the essential message. This technique is particularly useful for training in interviewing skills, especially if the PCP can see the film of himself interviewing in his own setting. It is also a great learning exercise for the teacher who is faced with the reality of the actual primary health care setting which is considerably different from the specialist clinics.

Another interesting technique found useful is a common psychological test administered to all patients who are later interviewed on videotape. Information about high scores on this test enables the teacher to pick up interviews where patients are more likely to have psychological problems in their presentations. The general format of training in these sessions is that the teacher begins showing the interview which is to be discussed, then stops the machine. The physician who has conducted the actual interview briefly gives information about the patient. The recording is started and stopped whenever the teacher or audience wants to make an observation or ask a question. If the patient was not handled well, the physician is asked how else he could have handled the situation. The teacher makes constructive suggestions when required but remains in general non-judgemental and helpful.

9. Use of manuals

Manuals have become an integral part of short-term training programmes in health in many countries all over the world. A list of manuals, which are available and have been commonly used in the Eastern Mediterranean Region during recent years to organize mental health training programmes for primary care physicians and other health personnel.

Manuals differ from standard textbooks in that they are smaller and briefer. They can be easily carried around and consulted in day-to-day work both during and after training, but more important than their size is their

emphasis on practical training. The focus is more on acquisition of skills rather than on only acquiring knowledge. For example, whereas a standard textbook of psychiatry, while describing a mental disorder, would use the conventional medical format of aetiology, signs and symptom, differential diagnosis, treatment, etc., a manual would directly describe the specific mental health tasks which a primary health care physician or worker is to perform during his/her duties, i.e. how to recognize and manage epilepsy or acute psychosis with a limited number of drugs or when to refer a case to a specialist centre, etc. The second essential feature of a manual is that it must be in simple language without excessive use of technical jargon. It is also important that it should be available in the local language in which the health staff have been educated.

The contents of a manual vary according to the objectives of the training programmes. For short training courses of one to two weeks duration, it is obvious that only a limited number of topics and clinical conditions can be included. Hence, priorities must be carefully chosen. From the public health point of view, priority must be given to those clinical conditions which are common, cause serious personal distress and social disability, and for which management is relatively simple, cost-effective and can be delivered at the community level. In mental health programmes, it is important that the training is not only confined to recognition and management of diseases, but also in factors in history, simple counseling measures such as reassurance and emotional support, etc. These skills can help the trainees in many situations of mental as well as general health problems. It is useful to have a summary of points to remember at the end of each chapter. Flowcharts have also proved very useful in many training programmes but they should be prepared carefully, keeping in mind the general educational background of the trainees and their familiarity with such methods.

Depending on whether a manual is to be used only by trainees or is planned for the use of trainers also, it should provide information on how to organise such training programmes including advice about pre- and post-training assessment of knowledge, attitudes and skills of the trainees.

Annex 10

Evaluation and monitoring of training programmes

The development of a comprehensive training programme is never achieved at the first attempt but evolves through progressive reinforcement by means of several courses. Measurements of improvement in the trainee's knowledge, skills and attitudes to mental disorders at the beginning and end of each course provide the only certain measure of checking the efficacy of the programme.

Trainees should be asked to comment freely on the content, organization and delivery of the course, indicating which elements of training they found helpful and which may have been unhelpful or confusing. This, together with the results of objective evaluation of trainee skills/knowledge, provides all the material necessary to refine the course for the next batch of trainees.

1. All courses could include the following *baseline* observations:
 - Trainees should provide a record of their “psychiatric” diagnoses during the previous month.
 - Their attitude to mental illness should be assessed, using specially constituted multiple choice questions.’
 - If the acquisition of *interview skills* is to be measured, each PCP should take a 10-minute history from a trained role-player who portrays a straightforward mental illness. Measures of the number of items of information extracted and interview behaviour are taken.

However, it is to be noted that this procedure is time-consuming and is not recommended for all centres.

2. All courses should collect observations at the end of training (e.g. on the last day):
 - Repeat measures of attitudes to mental illness.
 - Repeat measures of knowledge of psychiatry.
 - Let each trainer rate the *relevance* and *quality* of each component of the training course.
3. Optimally, at least one month after course completion, trainees can be surveyed by postal questionnaire to ascertain the impact of training on their practice.

In addition to these direct measures of the impact of training, it is possible to use health services statistics to monitor the impact of newly trained personnel on the existing services. Health administrators, in particular, would find such data invaluable. The information administrators are looking for can be conveniently summarized as: educational research evidence (evidence that the training has achieved the objectives set for it), health service evaluation (evidence that training has had an impact on services, e.g. number of referrals to secondary care) and systematically collected information on the number of cases identified by trained PCPs. If this last is collected for the broad diagnostic groupings taught in the course, the administrators would have the information they need to determine resource allocation.

Mental health in the Eastern Mediterranean Region: reaching the unreached

In 2001 mental health was brought to the focus of international attention when the World Health Organization devoted its World Health Day campaign and *The world health report* to the subject. In many countries around the world, and particularly in developing countries, mental health has long been a neglected area of health care, more often than not considered in terms of institutions and exclusion, rather than the care and needs of the human being. Current knowledge emphasizes early identification and intervention, care in the community and the rights of mentally ill individuals.

The countries of the Eastern Mediterranean Region represent many challenges for the organization of mental health care. Many countries are in a state of rapid social change, some are in conflict or suffering the aftermath of conflict, while others are witnessing the growing problem of substance abuse, with associated HIV/AIDS rapidly becoming a public health priority.

This publication addresses three aspects: the planning of mental health services; the current mental health situation in each of the countries of the Region, along with the innovative approaches developed during the past two decades, and the challenges and opportunities for addressing the mental health needs of the diverse populations. Bringing together the experiences of the Region provides an opportunity to learn from the past as well as for greater collaboration and cooperation in the future between countries facing similar problems.