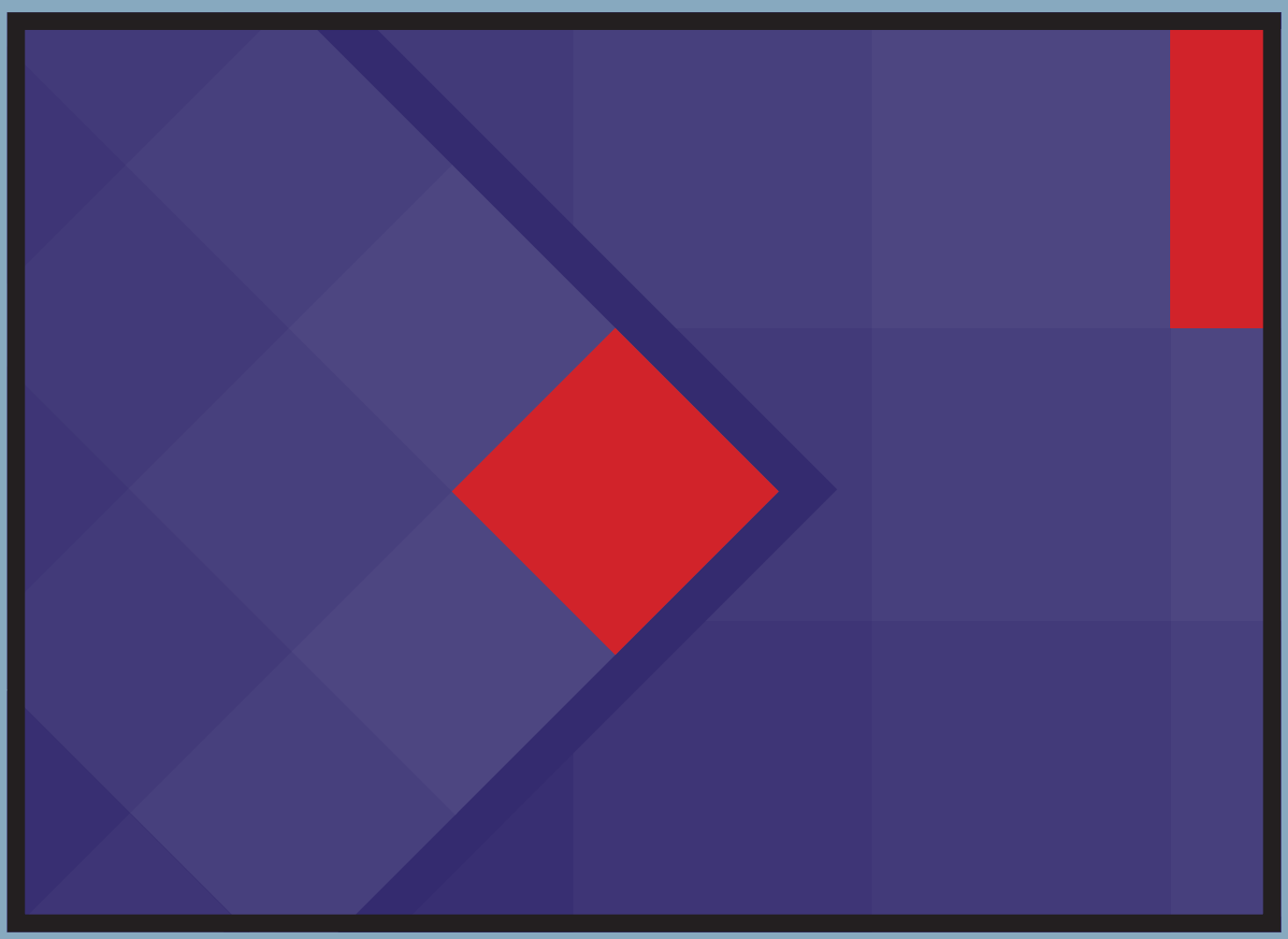
EMRO Technical Publications Series 37

Mental health systems in the Eastern Mediterranean Region

Report based on the WHO assessment instrument for mental health systems



World Health Organization
Regional Office for the Eastern Mediterranean

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Contents

Preface

The World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) is specifically designed for use by middle and low-income countries. The tool assesses key components of a mental health system. WHO-AIMS consists of six domains: 1) policy and legislative framework; 2) mental health services; 3) mental health in primary care; 4) human resources; 5) public information and links with other sectors; and 6) monitoring and research. These domains address the ten recommendations of *The world health report 2001. Mental health: new understanding, new hope* through 28 facets and 155 items.

Mental health systems in the Eastern Mediterranean Region, a regional WHO-AIMS report, has been developed based on the assessment conducted in individual countries of the WHO Eastern Mediterranean Region. The report summarizes the information collected for 14 of the 22 countries of the Region. Data is presented for all six domains of the WHO-AIMS. Data from individual countries was collected through key focal points in the ministries of health using secondary data sources and surveys, and aided by a project team conducting focus group and key informant interviews.

This report is aimed at policy-makers, health system managers, mental health professionals and others interested in mental health issues. The report will help countries to identify the main weaknesses in their mental health systems, and to develop information-based mental health policies and plans with clear base-line information and targets. It provides a starting point for countries to monitor progress in implementation of policies and legislation and to chart progress in provision of community-based services. It is hoped that the process of data collection will have stimulated system-level thinking by governments and health systems managers and prompt them to build a data infrastructure, implement data system improvements and build a network for mental health action. Finally, *Mental health systems in the Eastern Mediterranean Region* can serve as a potent advocacy tool for facilitating improvements in mental health services and, in the long term, for combating the stigma attached to mental health in the Region, based on evidence from within the Region.

Acknowledgements

Collaborators in 14 countries and the respective WHO country offices participated in collecting the data and preparing the country reports for this study of mental health systems in the WHO Eastern Mediterranean Region. They are listed below.

Afghanistan: Sayed Azimi; Djibouti: Mahamoud Daoud Dabar; Egypt: Fahmy Bahgat, Richard Gater, Mohamed Ghanem, Ahmed Heshmat, Rachael Jenkins and Nasser Loza; Jordan: Nabhan Abdulla Abu-Islaieh; Islamic Republic of Iran: A Hadjebi, Emran Razzaghi, Mohammad Taghi Yasamy and SA Bagheri Yazdi; Iraq: Salih Al Hasnawi and Muhmad Lufta; Morocco: Fatima Asouab, Noureddine Chaouki, Youssef El Hamaoui, Driss Moussaoui and Soumaya Rachidi; Oman: Asad Saeed Abod, Mahmoud Al Abri and Yusuf Mirza; Pakistan: Fareed Aslam Minhas; Somalia: Abdirisak M. Warsame and Abdi Rahman Ali Awale; Sudan: Zeinat Billa Sanhouri; Syrian Arab Republic: Pierre Chinara; Tunisia: Saïda Douki and Mounira Nabli; and the occupied Palestinian territory: Rajiah Abu Sway, Bassam Al Ashab, Othman Karameh and Ayesh Samour.

Management of the WHO-AIMS project at WHO headquarters was provided by Thomas Barrett and Jodi Morris. Annamaria Berrino, Patricia Esparza and Antonio Lora were actively involved in reviewing country data and providing feedback to country participants. Khalid Saeed served as the project manager for this report. Patricia Esparza conducted data analysis and drafted the content. Jodi Morris provided valuable technical input and direction. Grazia Motturi and Rosemary Westermeyer provided administrative support for various activities of the WHO-AIMS project. Haifa Madi, Khalid Saeed and Mohammad Taghi Yasamy, WHO Regional Office for the Eastern Mediterranean, reviewed various drafts of the WHO-AIMS instrument and participated actively in the WHO-AIMS country data collection and review process.

The WHO Assessment Instrument for Mental Health Systems (WHO-AIMS) was conceptualized and developed by the Mental Health: Evidence, Research and Action on Mental and Brain Disorders team of the Department of Mental Health and Substance Abuse, WHO, in collaboration with colleagues inside and outside WHO.

This project received financial assistance from: National Institute of Mental Health (NIMH) (under the National Institutes of Health) and Center for Mental Health Services (under the Substance Abuse and Mental Health Services Administration), United States of America; Health Authority of Regione Lombardia, Italy; Ministry of Public Health, Belgium; and Institute of Neurosciences, Mental Health, and Addiction and Canadian Institutes of Health Research, Canada.

Executive summary

This report summarizes descriptive data on the mental health systems of 14 countries in the WHO Eastern Mediterranean Region using the WHO Assessment Instrument for Mental Health Systems (WHO-AIMS). The findings are presented according to five essential building blocks outlined in WHO's mental health systems framework: mental health governance, financing, service delivery, human resources and information. Additionally, findings are presented according to the following desirable attributes of mental health systems: efficiency, access, equity, linkages with other sectors, and respect for human rights.

Results indicate that mental health systems in the Region are providing care to only a small proportion of those who need it. The median treated prevalence rate of 0.31% of the population per year in this study is a small fraction of what would be expected based on community epidemiological studies. The corresponding treated prevalence rate for children and adolescents is even lower. It is estimated that approximately one in 20 children has a severe mental disorder; however, the median treated prevalence rate in the Region is 0.07% of the child population per year, which suggests that the overwhelming majority of children and adolescents with severe mental disorders receive no treatment. This is of particular concern because a significant proportion of the population of the Region is under 19 years of age.

This study shows that mental health resources in the Region are scarce. The median number of mental health professionals is 3 per 100 000 population. Mental health spending per capita is US$ 0.15. This is a mere fraction of the US$ 3–4 suggested by WHO for a basic package of care. Furthermore, the resources that are available in the Region are inefficiently used: 6 psychiatric beds in 10 are located in mental hospitals, yet these facilities provide care for only 7% of all users. These facilities also consume a disproportionately large share of the available funds. The median proportion of mental health funds spent on mental hospitals is 50%, a sum that deprives community-based services of much needed funding. Development of community-based services has been slow and uneven in the Region, which impedes the scaling up of the mental health system. In addition to being scarce and inefficiently used, resources for mental health systems tend to be inequitably distributed. The majority of mental health beds, services, and staff are concentrated in the largest cities, thus limiting rural users' access to care.

The data suggest that connections between mental health care and other relevant components of the health care system as well as non-health sectors are weak. Although the majority of countries reported formal collaborations between mental health care and primary health care departments, there is little, if any, integration of mental health care into primary health care. For example, psychotropic medicines and assessment and treatment protocols are not widely available and few primary health care clinics make regular referrals to higher levels of care.

In a number of countries, little attention is paid to human rights and there are few mechanisms in place to protect users' rights. Mental health legislation exists in half of the 14 reporting countries, human rights inspections and training are infrequent, and collection of data on involuntary admissions, physical restraint, and seclusion is limited. Moreover, user and family associations are absent in more than half of the countries.

The study shows that, although there is some noteworthy variation in national mental health system profiles based on income and emergency status, the countries have more characteristics in common than differences. Furthermore, a comparison of the findings of this study to the findings of a broader 2009

WHO-AIMS study and the *Mental health atlas 2005* reveals that the state of the Region's mental health systems reflects the global situation.

Altogether, the findings presented in this report indicate an urgent need for improvement in the provision of mental health care in the Region. On a more positive note, data from this report can help participating countries to gauge the major challenges and obstacles in providing care for their citizens with mental disorders. With this comprehensive information, countries in the Region can bring together key stakeholders and develop plans to strengthen and scale up mental health services.

Key findings

- In almost all aspects, the mental health systems of the Region reflect the status of mental health systems in the global sample.
- Although a few aspects of the Region's mental health systems differ according to countries' income and emergency status, for the most part, they have more similarities than differences on WHO-AIMS indicators.
- Mental health resources are scarce, inequitably distributed and inefficiently used.
- Community-based mental health services are underdeveloped.
- Mental health systems often are not well linked to other relevant sectors.
- Human rights are given insufficient attention.

1. Introduction

1.1 Background

Mental health problems are a public health issue. About 14% of the global burden of disease has been attributed to neuropsychiatric disorders and they account for 31.7% of all years lived-with-disability (*1*). Worldwide, community-based studies estimate the lifetime prevalence of mental disorders in adults at 12.2–48.6% and 12-month prevalence rates at 8.4–29.1% (*2*).

The Eastern Mediterranean Region, which comprises 22 countries, is by no means homogenous. There are significant differences among the countries in terms of their gross domestic product, sociodemographic make-up and health indicators, as well as in terms of health system capacities and coverage. Another important difference is that in some countries there has been a significant increase in the chronic disabling noncommunicable disease burden and some countries are faced with the double burden of communicable as well as noncommunicable diseases. There are also countries that still have a large burden of infectious diseases. Mental health may be a common denominator that can underpin efforts in the field of health because of its potential applications and utility for enhancing health systems across the spectrum of noncommunicable and communicable diseases.

Disasters, emergencies and conflicts present a continual challenge to health in the Region. Seven countries, accounting for about 40% of the regional population, are in complex emergency situations. A number of other countries have experienced, and are at risk of, natural disasters such as earthquakes, floods, and droughts. Moreover, globalization and its attendant rapid social changes and unplanned urbanization have conspired to amplify the stresses of daily life. They pose a constant threat to physical and mental health, affecting already vulnerable members of the population, such as mothers, children and adolescents, in different ways.

In low-income and middle-income countries, which constitute the majority of the countries of the Region, neuropsychiatric disorders (including unipolar depressive disorder, bipolar disorder, schizophrenia, epilepsy, substance abuse disorders, dementias, anxiety disorders and mental retardation) account for 9.8% of the total burden of disease. Self-inflicted injuries increase this proportion to 11.1%. Table 1.1 shows the burden of disease attributable to neuropsychiatric and substance abuse disorders in the reporting countries.

Mental health systems in almost all countries of the Region are a long way from meeting current needs. To a large extent, psychiatric hospitals in many of these countries remain the primary mode of mental health care, absorbing a sizeable proportion of mental health resources. The participation of primary health care in the delivery of mental health services is limited. In addition, primary care providers are inadequately trained to effectively handle psychosocial problems.

Despite the huge burden of mental disorders, few resources are directed towards mental health care. Mental health spending in many countries in the world is less than 1% of their health budget and the number of mental health professionals is grossly deficient. Resources for mental health are particularly meagre in low-income countries. Moreover, the scarce resources that are available are often inefficiently used and inequitably distributed, resulting in treatment gaps as high as 76%–85% in low and middle-income countries (*3*).

The ten recommendations of *The World Health Report 2001* serve as WHO's vision for the improvement of mental health systems to reduce the burden of mental disorders (*4*). Acting on the recommendations of that report, WHO launched the Mental Health Gap Action Programme (mhGAP) in October 2008 as a priority programme for the following six years. It is aimed at providing effective and humane care for all people with mental, neurological and substance abuse disorders. The goal is to close the gap between what is urgently needed and what is

Table 1.1. Burden attributable to neuropsychiatric and substance abuse disorders in 14 countries of the Region

Country	World Bank income category (2009)	Population in thousands (2006)	Mental, neurological and substance abuse (MNS) disorders in DALYs (in thousands)	MNS disorders DALYs per 100 000 population
Afghanistan	Low	22 930	612	2 671
Djibouti	Lower middle	693	11	1 591
Egypt	Lower middle	70 507	1 194	1 694
Iran, Islamic Republic of	Lower middle	68 070	1 676	2 463
Iraq	Lower middle	24 510	402	1 640
Jordan	Lower middle	5 329	100	1 876
Morocco	Lower middle	30 072	490	1 631
Oman	High	2 567	56	621
Occupied Palestinian territory	Lower middle	3 637	NA	NA
Pakistan	Lower middle	149 911	3 435	2 291
Somalia	Low	9 480	148	1 565
Sudan	Lower middle	32 878	499	1 518
Syrian Arab Republic	Lower middle	17 381	245	1 411
Tunisia	Lower middle	9 728	168	1 726

DALYs: disability-adjusted life years
NA: not available

currently available in order to reduce the burden of mental, neurological and substance abuse disorders worldwide (5). This assessment process represents a very important step in development of national health policies and plans and for the restructuring of mental health services.

This report summarizes the most relevant information collected for 14 countries of the Region. Data are presented for all six areas covered by WHO-AIMS: policy and legislative framework; mental health services; mental health in primary care; human resources; public education and links with other sectors; and monitoring and research.

1.2 The sample

Data presented in this report are based on those provided by 14 countries that completed the WHO-AIMS assessment tool between February 2005 and July 2009. All participating countries were identified by the Regional Office as countries for which a WHO-AIMS assessment would be beneficial. Two are low-income countries, 11 are lower middle-income countries, and one is a high-income country, according to World Bank July 2009 criteria (6). For the purposes of this study, available data from a high-income country were included in the analysis in order to demonstrate the range of countries representative of the Eastern Mediterranean Region.

In addition, for the purposes of this report, the 11 countries from the lower middle-income category were divided into two groups: those four countries facing complex emergency situations (Jordan, Iraq, Sudan and occupied Palestinian territory) and the remaining seven countries. Only countries from the lower middle-income group were compared based on their emergency status in order to control for income level and to ensure that findings reflect the emergency status of the country, rather than its level of economic resources. (For the sake of brevity, countries in complex emergency situations are often referred to as "emergency countries" throughout the report.)

It is important to note that the data and cross-national analyses presented in this report relate only to the sample of countries that reported on each item (i.e. the participating countries), although this may not be stated explicitly every time the countries are mentioned. Since these countries constitute a relatively small and not

necessarily representative sample, the results may not be easily generalized to other countries or considered applicable to the entire Region. Furthermore, given the difficulties of collecting data in settings with fewer resources, there were some items for which the participating countries were unable to provide the relevant data. In those instances, the country sample was even smaller, which further limits the possibility for generalization of the results.

1.3 Terminology used in the report

Basic definitions are provided for the terms used in this report. However, the WHO-AIMS[1] instrument should be consulted for more extensive definitions, including exclusion and inclusion criteria for each of the terms (7). Some terms used in WHO-AIMS have caused confusion among the users of the instrument. For example, a "community-based psychiatric inpatient unit" is defined as a psychiatric unit that provides inpatient care for the management of mental disorders within a community-based facility. Typically, these units are located within general hospitals. However, since the term "general hospital" is not used, some users of the instrument reviewed all the facilities covered by the instrument and concluded that psychiatric units in general hospitals were not covered by this assessment. Thus, it must be noted that psychiatric care provided in general hospitals is covered under the community-based inpatient unit category. Other terms used in this instrument have fallen into disfavour. For example, "mental retardation" is now more commonly referred to as "intellectual disability". However, since the term "mental retardation" was used when the instrument was drafted, we use this term in the report so that it is consistent with the terminology used in WHO-AIMS. Terms that cause confusion, as well as terms that are no longer in popular usage, will be revised in the next version of the instrument.

1.4 Methodology

Data for each country were collected by a team coordinated by the mental health focal point of the Ministry of Health. The data were reviewed and finalized by WHO headquarters, the Regional Office for the Eastern Mediterranean and the national focal points. Only countries whose data were finalized by July 2009 were included in the analysis.

Data in the report contain standard indicators as they appear in WHO-AIMS. In addition, some of the indicators have been transformed into standardized measures to facilitate comparison with other countries. For example, the number of mental health facilities was divided by the country's population to reveal the number of facilities per population. Other indicators were combined to form composite indicators. For example, the numbers of users treated at each type of mental health facility (e.g. outpatient facilities and day treatment facilities) were added to provide a total treated prevalence figure. In many cases, the sample sizes for the composite indicators are reduced because if a country was missing data on any of the items that comprise the composite indicator, a value for that composite was not calculated. All sample sizes (signified by *n*) are provided in the figures and tables.

This report compares findings of this regional study to findings of the WHO-AIMS study of mental health systems in 42 countries, including seven countries from the Eastern Mediterranean Region, published in 2009 (*8*). The latter study clearly states that it is not representative of the global situation. However, for lack of available data on mental health systems in general, its findings are taken as a proxy of the global context. Hence, findings in this report are often compared to findings in that study in order to gauge the extent to which mental health systems in the Region reflect the status and development of mental health systems in general. For the sake

[1] For a complete list of WHO-AIMS definitions, see the WHO-AIMS instrument at: http://www.who.int/mental_health/evidence/AIMS_WHO_2_2.pdf

of brevity, findings from the 2009 WHO-AIMS study are referred to using terms such as "global situation", "global sample", "global trends", and "global total". Lastly, the reader will notice that this report closely resembles the WHO-AIMS study with respect to its content, presentation of results, discussion, and general conclusions. This was done because WHO has presented a clear mental health framework with a number of key building blocks and attributes by which to evaluate mental health systems.

2. Building blocks of mental health systems

Well functioning health systems are essential to increasing access to health care and reducing the burden of disease. WHO has proposed a framework for evaluating the effectiveness of general health systems through a number of "building blocks". These building blocks include: service delivery, health workforce, information, medical products, vaccines, technologies, financing, and leadership/governance (*9,10*). Improvement in all these areas is necessary to improve health outcomes. Mental health systems share many of the same core building blocks as general health systems and include a few others as well. The primary building blocks of mental health systems assessed in WHO-AIMS are:

- Mental health governance
- Financing
- Information systems
- Service delivery
- Psychotropic drugs
- Mental health workforce
- User/consumer and family associations

In this section, findings are presented according to these mental health system building blocks.

2.1 Mental health governance

Mental health governance addresses the role of the government in guiding and overseeing the mental health system. Governance involves ensuring the existence of a strategic policy and legislative framework, combined with effective oversight and accountability mechanisms.

Policies and plans

Good governance and leadership are implemented in part through well defined mental health policies and plans. The existence of explicit mental health policies and plans helps improve the organization and quality of mental health service delivery, accessibility, community care, and the engagement of people with mental disorders and their families (*11*). The term mental health policy refers to an organized set of values, principles, and objectives to improve mental health and reduce the burden of mental disorders within a population (*2*). A mental health plan is a detailed scheme for action that usually includes setting principles for strategies and establishing timelines and resource requirements (*11*).

The results of this study indicate that the majority of the 14 reporting countries in the Region have either a mental health policy or plan (86%; $n = 12$). Policies and plans were considered a single entity in these analyses because in many cases the policy and plan are not conceptualized separately by the countries and were incorporated into the same document. Of the participating countries that have a policy or plan, the majority (79%; $n = 11$) developed them within the past 10 years (Figure 2.1). Two countries reported having no policy or plan.

For countries susceptible to natural disasters, a sign of good governance in emergency situations is the existence of a disaster/emergency preparedness plan for mental health. This refers to a plan of action on mental health in the context of a disaster or emergency. It usually sets priorities for strategies and establishes timelines and resource requirements. Only 21% ($n = 3$) of the reporting countries have a disaster/emergency awareness plan.

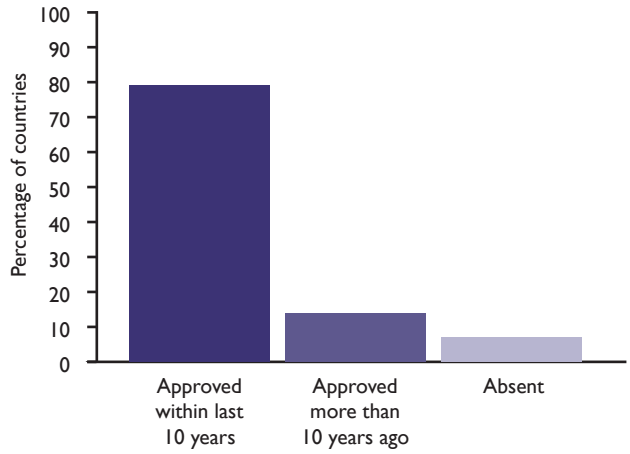

Figure 2.1 Percentage of countries with a mental health policy or plan ($n = 14$)

Table 2.1 Plans and legislation in each country

Country	Year of last version of mental health policy	Year of last version of mental health plan	Year of last version of disaster/ emergency preparedness plan for mental health in emergencies	Year of last version of mental health legislation
Afghanistan	1987	1987	NA	1997
Djibouti	NA	2005	NA	NA
Egypt	2003	2003	NA	2009
Iran, Islamic Republic of	2004	2004	2004	NA
Iraq	2004	2005	NA	2005
Jordan	NA	NA	NA	NA
Morocco	2002	2004	2003	1959
Oman	1992	2005	NA	NA
Occupied Palestinian territory	2004	2004	NA	NA
Pakistan	2003	2003	2006	2001
Somalia	NA	NA	NA	NA
Sudan	2008	2002	NA	1998
Syrian Arab Republic	2007	2007	NA	1953
Tunisia	1990	2001	NA	2004

NA: not available

2.1.2 Legislation

Mental health legislation is also a key component of governance. Such legislation refers to specific legal provisions that focus on one or more of the following issues: human rights protection, professional training, involuntary admission and treatment, guardianship, and service structure.

Mental health legislation exists in 57% (n = 8) of the 14 reporting countries. However, in two of the eight reporting countries, the legislation was drafted in 1959 and 1953. The other six countries have more up-to-date legislation, dating from 1997, 1998, 2001, 2004, 2005, and 2009 (Table 2.1, Figure 2.2).

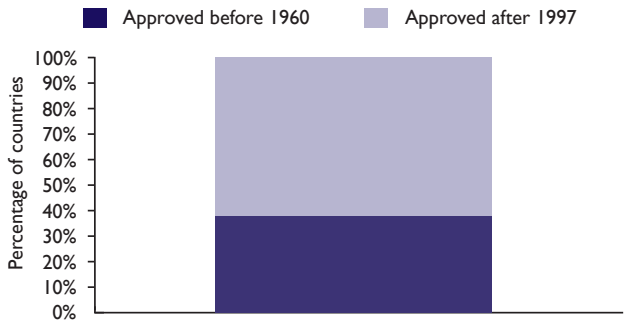

Figure 2.2 Percentage of countries with mental health legislation (n = 8)

2.2 Financing

A good health financing system raises adequate funds for health care to ensure that people can use needed services and that they are protected from financial catastrophe or impoverishment associated with having to pay for such services.

The countries spend a median of US$ 0.15 per person on mental health. This is substantially lower than the US$ 0.30 per capita that was reported by the global sample (*8*). The occupied Palestinian territory spends the most on citizens and four countries spend close to US$ 0 (Figure 2.3).

Furthermore, the median mental health spending as a proportion of the health budget for the reporting countries (n = 9) is 2%. This means that governments in the Region devote only 2% of their health budget to mental health, which is the same amount reported by the countries in the global sample (*8*). Morocco devotes the highest percentage to mental health, whereas three countries allocate little to no money for mental health services (Figure 2.4).

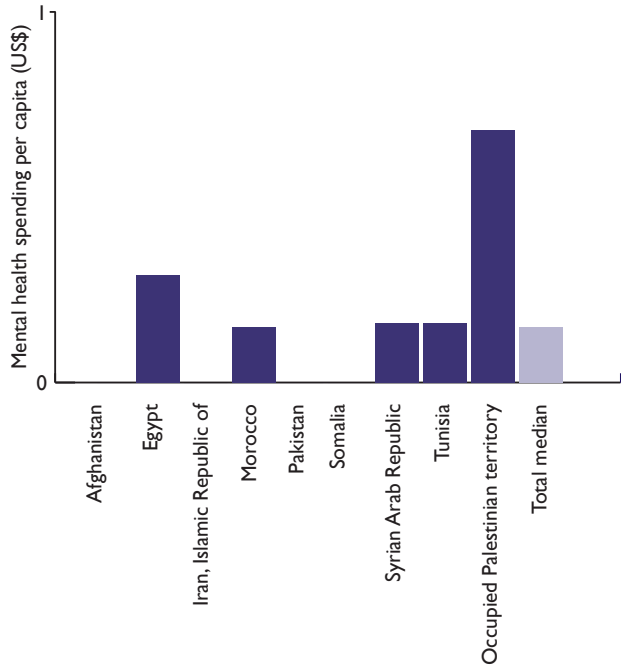

Figure 2.3 Government mental health spending per capita (US$) for each reporting country and the median for the total sample (*n* = 9)

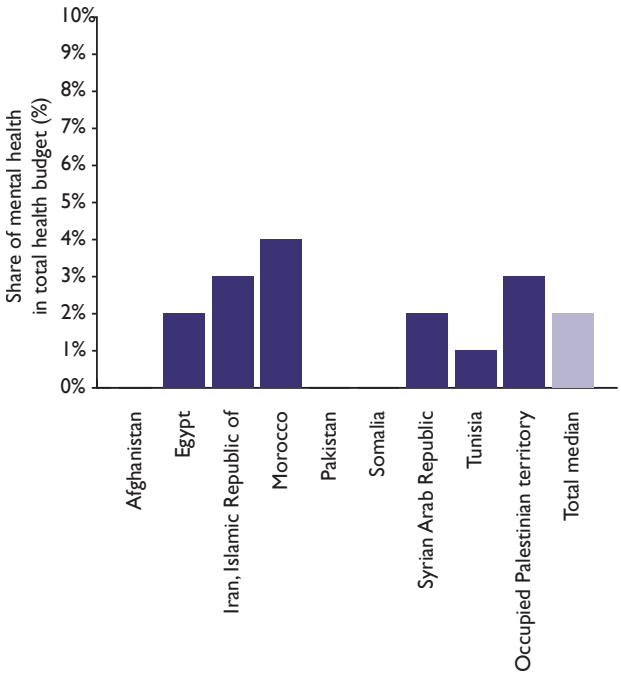

Figure 2.4 Percentage of health budget spent on mental health for each reporting country and the median for the total sample (*n* = 9)

2.3 Information systems

The mental health of communities should be monitored through mental health indicators in health information and reporting systems. Such monitoring helps to determine trends and to detect mental health changes resulting from external events. It is a necessary means of assessing the effectiveness of mental health prevention and treatment programmes. It also strengthens arguments for the provision of more resources.

Countries were asked whether all mental health facilities have a formally defined list of data items that they are required to collect. Information on the specific items collected by each type of facility is provided later in this report. Similar to the analysis of the global sample (*8*), most (71%) of the countries have such a system (Figure 2.5).

A characteristic of an effective mental health information system is the extent to which information is disseminated to the country's population. In the Region, more than two thirds (65%) of government health departments publish a report covering mental health data. However, few publish a report that contains comments on the data (Figure 2.6).

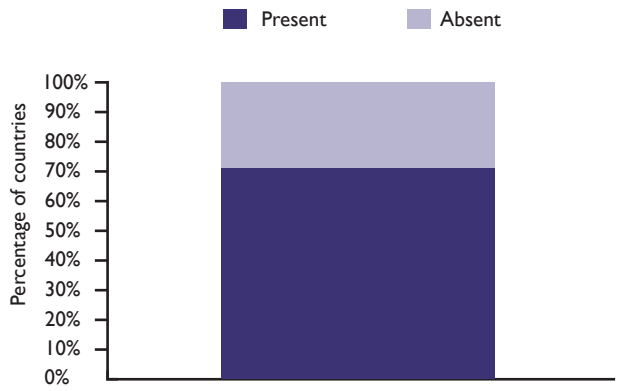

Figure 2.5 Percentage of countries with a formally defined minimum data set (*n* = 14)

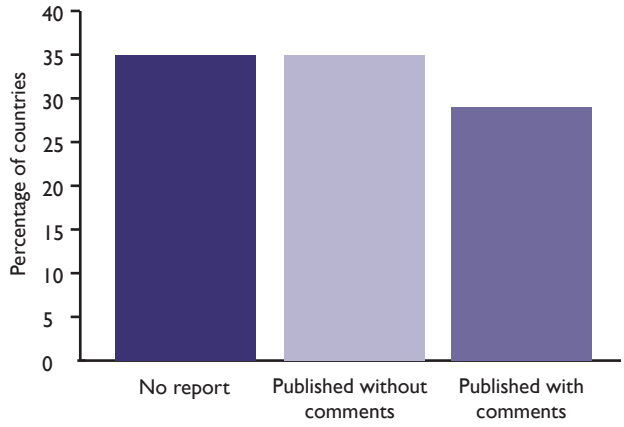

Figure 2.6 Percentage of countries with a report on mental health services published by the government health department (n = 14)

2.4 Service delivery

Mental health services are the means by which interventions for mental health are delivered (*12*). Most countries provide mental health care in three different settings: primary health care, community-based mental health facilities, and mental hospitals/institutional facilities.

Mental health in primary health care

Managing and treating mental disorders at the primary health care level is a fundamental element of enabling the largest number of people to get easier and earlier access to services (*5*). The integration of mental health care into primary health care systems was assessed in this study by investigating:

- Laws allowing psychotropic drugs to be prescribed by primary health care staff;
- Availability of assessment and treatment protocols in primary health care centres;
- Extent to which referrals are made to a higher level of care from primary health care facilities;

Mental health care in primary health care was assessed in physician-based primary health care centres, in which a medical doctor is part of the regular staff, as well as in non-physician-based primary health care centres, in which no medical doctors are part of the regular staff.

Countries were also asked whether or not formal collaboration between the government mental health department and the department responsible for primary health care exists. A formal link is defined as a programme that involves a written agreement of collaboration and/or a joint activity or publication. Of all the participating countries, 71% (10 out of 14) reported having such a link.

Prescription of psychotropic medicines in primary care

For mental health to be successfully integrated into primary health care, primary health care staff should be allowed by law to prescribe psychotropic medicines. All reporting countries allow primary health care doctors to prescribe psychotropic medicines; however, only one country (Somalia) allows prescription of such medicines by nurses and other health workers (non-doctors/non-nurses) (Figure 2.7). Fewer countries in the Region allow primary health care staff to prescribe medicines than in the global sample (24%) (*8*).

Availability of assessment and treatment protocols in primary care

Three (21%) of the participating countries do not have assessment or treatment protocols available in any physician-based primary health care clinics and 11 (79%) countries do not have these tools available in any non-physician-based primary health care clinics.

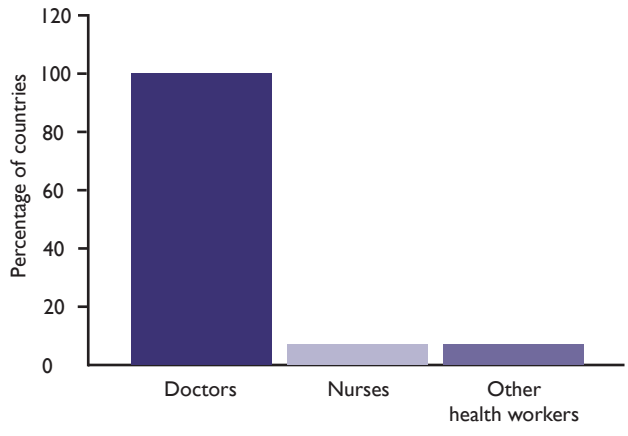

Figure 2.7 Percentage of countries that allow prescription of psychotropic medicines by primary health care staff (n = 14)

Moreover, only 21% of countries have assessment or treatment protocols available in all, or almost all (81%–100%), of their physician-based primary health care clinics. Only the Islamic Republic of Iran has such tools available in all, or almost all, of its non-physician-based primary health care clinics. Assessment and treatment protocols include guidelines, manuals, or videos on mental health for primary health care staff. They also include referral and back-referral procedures between primary health care clinics and mental health services.

In summary, the ability for primary health care staff to prescribe medicine and access assessment and treatment protocols in non-physician-based primary health care clinics is more limited than in physician-based clinics.

Referrals between primary care and mental health facilities

Effective links between different levels of care are necessary for the provision of mental health care. These links were measured by the extent to which primary health care centres made at least one referral per month to a higher level of care.

In all participating countries, only a few (1%–20%) full time primary health care doctors make, on average, one referral to a mental health professional per month. Three countries (21%) reported that all, or almost all, of their primary health care centres make at least one monthly referral to a higher level of care. However, one monthly referral may not be sufficient to establish an effective link between different levels of care.

2.5 Organizational integration of services

A mental health authority is an organizational entity responsible for mental health care. Such an authority is present in all but one of the reporting countries. More countries in the Region have such an entity than countries in the global sample (*8*).

The organization of mental health services was assessed by asking countries about the existence of catchment areas (or services areas), defined as geographical areas whose residents have access to basic mental health services from assigned facilities. All 14 countries provided this information and 50% of them appear to organize services by catchment areas.

The extent to which services are organized by catchment area differed by income category, with 55% ($n = 6$) of lower-middle-income countries using this kind of system, compared to 0% of low-income countries. This downward trend by income is consistent with global trends (*8*).

2.6 Mental health facilities

Overview

Table 2.2 shows the number of mental health facilities in each country.

Outpatient facilities

An outpatient facility is a mental health facility that focuses on the management of mental disorders, and the clinical and social problems related to them, on an outpatient basis. All the reporting countries have at least one outpatient facility.

The availability of these facilities is different for countries of distinct income levels: the rate of facilities per 100 000 population is 0.17 in lower middle-income countries, 0.09 in low-income countries, and 1.01 for the high-income country. As can be seen, the rate of outpatient facilities in lower middle-income countries is double that of low-income countries.

The availability of outpatient facilities is one facility per 607 000 population ($n = 14$). The number of people served by one facility increases as income level decreases. Specifically, one facility in the high-income country serves 9873 people, while one facility in a low-income country serves over 1 million people (1 508 000).

A mere 5% of beds in outpatient facilities are reserved for children and adolescents. Furthermore, each outpatient facility in the Region serves a much larger population of children and adolescents (one facility per 2 million population) than adults (one facility per 600 000 population).

Table 2.2 Mental health facilities in each country

Country	Mental hospitals	Outpatient facilities	Day treatment facilities	Community-based psychiatric inpatient units	Community residential facilities
Afghanistan	1	11	1	5	0
Djibouti	0	1	0	1	0
Egypt	15	62	2	27	0
Iran, Islamic Republic of	33	855	31	46	75
Iraq	2	25	0	9	0
Jordan	4	47	1	0	0
Morocco	9	74	0	15	0
Occupied Palestinian territory	2	42	0	0	NA
Oman	1	26	0	2	0
Pakistan	5	3729	0	624	0
Somalia	2	4	0	1	0
Sudan	2	17	0	9	7
Syrian Arab Republic	5	25	0	15	35
Tunisia	1	16	2	7	0

NA: not available

In the global sample, one facility serves 200 000 children and adolescents (*8*).

The median rate of users in outpatient facilities is 299 per 100 000 population for the entire sample (Figure 2.8), which is two thirds of the median rate (503) in 37 countries from the global sample (*8*).

For the whole sample, the average proportion of women served in outpatient facilities is 45% (Table 2.2), while the percentage of children treated in outpatient facilities is 12% (*n = 11*).

Outpatient contact is defined as an interaction (e.g. an intake interview, a treatment session, or a follow-up visit) involving a user and a staff member on an outpatient basis. The median rate per 100 000 outpatient contacts for 10 of the 14 reporting countries is 2317. This is similar to the

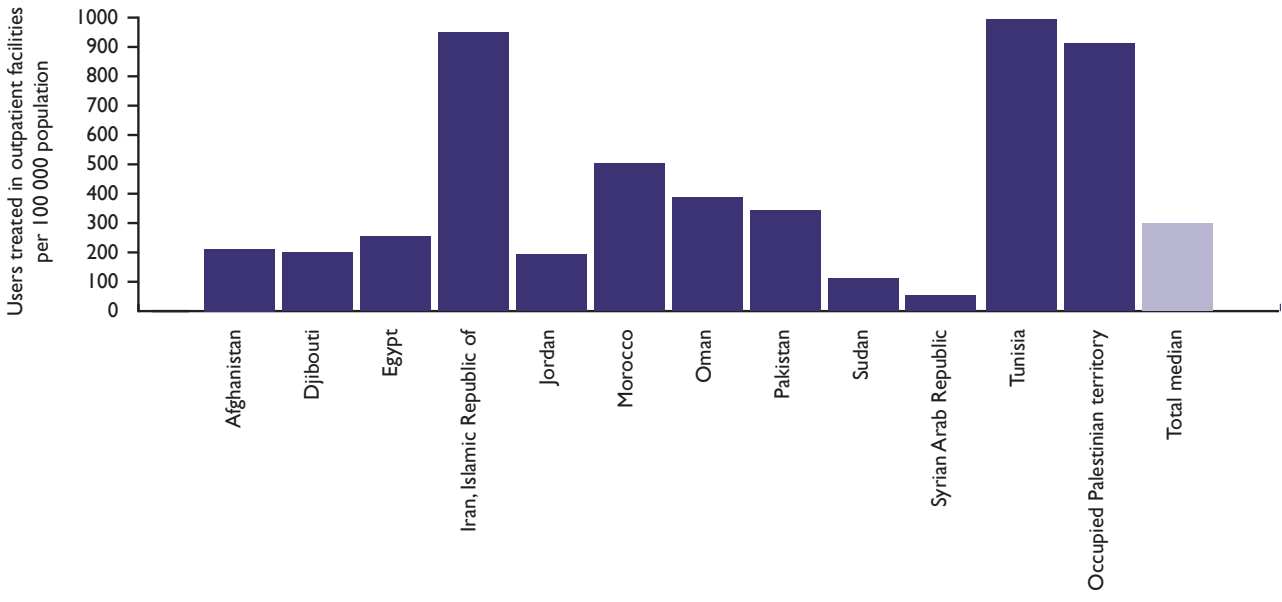

Figure 2.8 Users treated in outpatient facilities (rates per 100 000 population) for each country (*n* = 12)

Table 2.3 Summary of outpatient facility indicators (median) for the Region and the global sample

Indicator		Regional total	Global total
Number of facilities per 100 000 population	*n*	14	41
	median	0.16	0.32
Population served by one facility	*n*	14	41
	median	607 300	308 920
Number of children/adolescents served by one facility	*n*	11	25
	median	2 083 000	1 052 965
Percentage of women users	*n*	13	32
	median	45%	46%
Percentage of children/adolescents treated	*n*	11	31
	median	12%	12%
Contacts per patient	*n*	10	31
	median	4.7	3.5
Percentage of facilities with mental health mobile clinic teams	*n*	14	40
	median	0%	0%
Percentage of facilities with follow-up community care	*n*	14	40
	median	1%	18%
Percentage of facilities for children/adolescents only	*n*	14	40
	median	5%	3%

Note: *n* = number of countries that were able to provide data for that particular item.

median rate for the 30 participating countries (2144) in the global sample (*8*).

A mental health mobile team is an outpatient team that provides regular clinics in different places to address the problem of inadequate physical access to mental health facilities. There are very few such teams in the participating countries (median is 0%). In addition, the provision of follow-up community care is 1% for the total sample (Table 2.3). Follow-up community care refers to care provided outside the premises of the facility (e.g. follow-up home care to check medication adherence).

Regarding diagnostic patterns in outpatient facilities, about one quarter of patients are diagnosed with mood disorders and neurotic disorders, while one fifth of the outpatients are diagnosed with schizophrenia and "other disorders" (e.g. epilepsy, organic mental disorders, mental retardation, behavioural and emotional disorders with onset in childhood and adolescence, and psychological development disorders) (Table 2.4).

Nurses constitute the largest number of professionals in outpatient facilities in the Eastern Mediterranean Region (Figure 2.9).

Collection of mental health information in outpatient facilities was assessed by measuring the proportion of facilities that collect three specific types of information: user contacts, users treated and diagnoses. Median rates for the collection of information on user contacts and diagnoses are 100% for all countries. This indicates that in the majority of participating countries information on users treated, user contacts and diagnoses is collected in all outpatient facilities.

Table 2.4 Summary of outpatient diagnostic patterns (median %) for the Region and global sample

Outpatient diagnostic pattern	Regional total (*n* = 9)	Global total (*n* = 28)
Substance abuse disorders	3	4
Schizophrenia	18	19
Mood disorders	24	19
Neurotic disorders	22	20
Personality disorders	3	2
Other	19	25

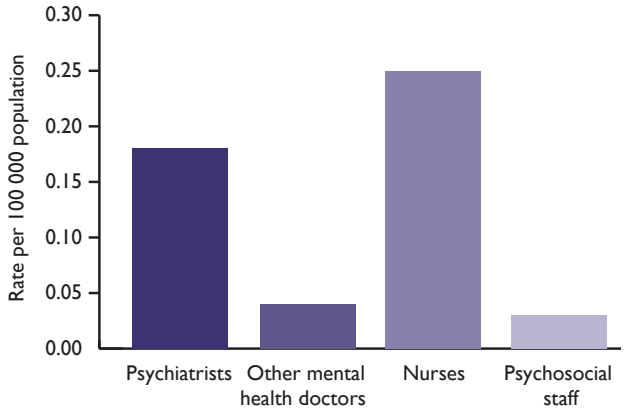

Figure 2.9 Staff working in outpatient facilities (median rates per 100 000 population) (*n* = 12

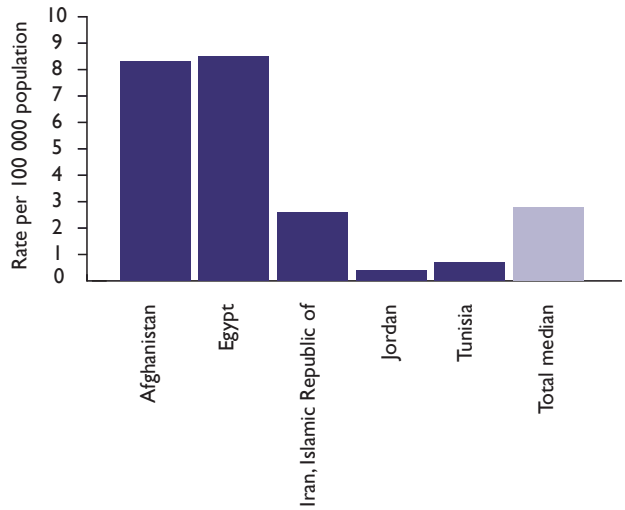

Figure 2.10 Users treated in day treatment facilities (rate per 100 000 population) (*n* = 5)

It appears that fewer facilities in low-income countries collect all three forms of information. While all outpatient facilities collect information in all three areas, 50% of outpatient facilities in low-income countries collect information on the number of user contacts and diagnoses, yet 0% of the facilities collect data on the number of users treated.

Day treatment facilities

A day treatment facility is a mental health facility that typically provides care for users during the day (*7*,*13*). The facilities generally: are available to groups of users at the same time (rather than delivering services to individuals one at a time); expect users to stay at the facilities beyond the periods during which they have face-to-face contact with staff (i.e. users do not stay at the facility only for the duration of their consultation with staff); and involve attendance that lasts half a day or one full day. Five of the 14 countries (36%) have at least one day treatment facility in their country. The other 64% (nine countries) do not have this type of facility. As in the global sample (*8*), such facilities are rare in the Region. For those that have day treatment facilities, the facility per population ratio is very low, with only one facility serving 5 600 000 people.

The rate of users treated in day treatment facilities is 2.8 (*n* = *5*) per 100 000 population (Figure 2.10), which is substantially lower than the global rate of 6.3 (*n* = *27*) (*8*).

The percentage of women treated in day treatment facilities is 42%, whereas the median percentage of children and adolescents treated is only 6%. Only one of the five countries with these facilities reported having day treatment facilities that specialize in treating children and adolescents.

The rate of attendance in day treatment facilities is 107. The global rate (469) is more than four times the Region's rate (*8*). Day treatment attendance refers to the number of days users spend in day treatment facilities per 100 000 population.

Day treatment facilities usually provide many days of treatment for each patient. Results indicate that the average number of days spent in these facilities per patient in a year is 37 days for the five countries (Table 2.5).

Community-based psychiatric inpatient units

A community-based psychiatric inpatient unit is a psychiatric unit that provides inpatient care for the management of mental disorders within a community-based facility. These units are usually located within general hospitals (e.g. acute care units) and they provide care to users with acute problems. The period of stay is usually short (weeks to months). Of the entire sample of 14 countries, two reported having no such units.

Table 2.5 Summary of mental health day treatment facilities and indicators (median) for the Region and the global sample

Indicator		Regional total	Global total
Number of facilities per 100 000 population	*n*	14	42
	median	0.00	0.01
Population served by facility	*n*	5	3
	median	5 600 00	1 687 280
Number of children/adolescents served by one facility	*n*	1	9
	median	1 278	2 324 661
Percentage of women users	*n*	5	25
	median	42%	47%
Percentage of children and adolescents treated	*n*	3	25
	median	6%	5%
Average number of days spent in facilities	*n*	5	21
	median	37.46	40
Percentage of facilities for children and adolescents only	*n*	5	39
	median	0%	0%

Note: *n* = number of countries that were able to provide data for that particular item.

The rate of beds per 100 000 population is 0.98 (n = 12). This rate mirrors that of the global sample of 1.01 (*8*). Rates of beds seem to differ by emergency status: non-emergency countries have twice as many beds (2.27 per 100 000 population; n = 6) as emergency countries (0.94; n = 4) (Figure 2.11).

The rate of admission in community-based inpatient units is 24.19 for the 11 reporting countries. Jordan and the occupied Palestinian territory do not have inpatient units and one country does not know its number of admissions.

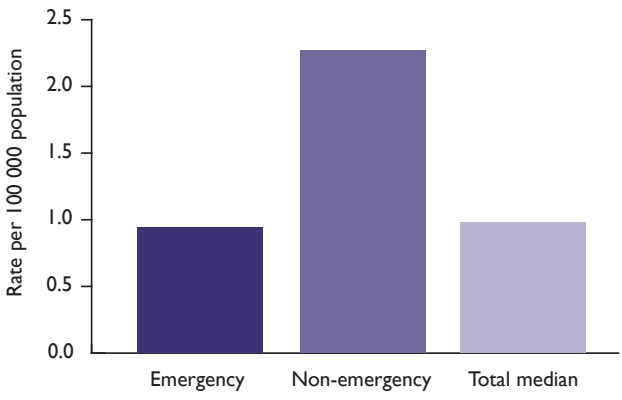

Figure 2.11 Beds in community-based psychiatric inpatient units, by emergency status (median rate per 100 000 population) (n = 12)

With no mental hospitals in the country, Djibouti has the highest number of admissions in inpatient units (Figure 2.12).

The proportion of women in community-based psychiatric inpatient units is approximately 33% for the whole sample. The percentage of adult female users differs according to their country's emergency status and income level. In non-emergency countries, 28% of users are women (n = 4), as opposed to 46% in emergency countries (n = 6). In terms of income groups, the proportion of female users is: 24% for low-income countries, 38% for lower middle-income countries, and 48% for the high-income country. Use of these facilities by children and adolescents is low (1%) for the whole sample.

The rate (per 100 000 population) of days spent per year in community-based psychiatric inpatient units is 248.8 (n = 9), while the average number of days per year spent per patient in community-based inpatient units is 23.3 days (Table 2.6).

With respect to population served per facility, there is a clear discrepancy between countries based on emergency status. Specifically, in countries facing emergency situations (n = 4) one inpatient unit serves 3 million people, whereas

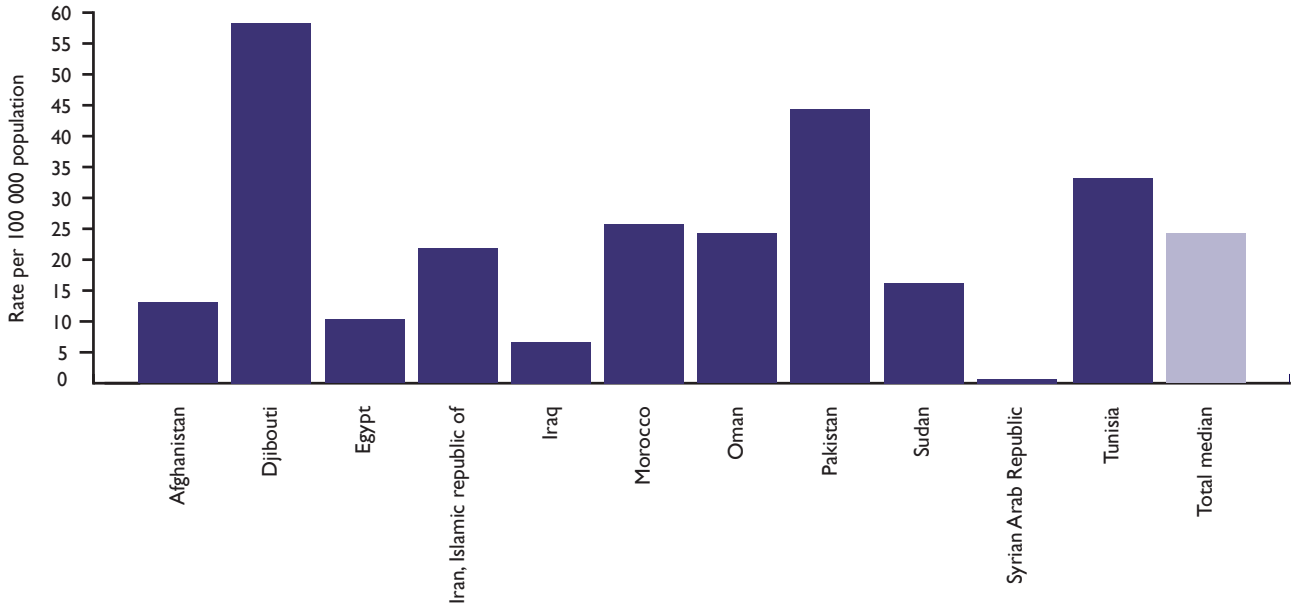

Figure 2.12 Admission rates in community-based psychiatric inpatient units (rate per 100 000 population) for each country (*n* = 11)

in non-emergency countries (*n* = 6) one facility serves 1 million.

In the 10 countries that provided data, involuntary admissions constitute about 8% of admissions to community-based inpatient units. This is substantially lower than the global rate of about 25% (*8*).

Data on physical restraint and seclusion in inpatient units were reported by seven of the 14 countries. Six of the reporting countries noted that more than 6% of patients were secluded or restrained per year. More specifically, four countries reported that over 20% of patients were restrained or secluded. One country reported that less than 1% of its patients were secluded or restrained.

Table 2.6 Summary of indicators for community-based psychiatric inpatient units (median) for the Region and global sample

Indicator		Regional total	Global total
Number of units per 100 000 population	*n*	14	42
	median	0.04	0.04
Population served by one facility	*n*	12	35
	median	1 730 100	1 744 493
Percentage of beds for children and adolescents only	*n*	12	39
	median	0%	0%
Percentage of female patients	*n*	12	28
	median	33%	42%
Percentage of child/adolescent admissions	*n*	9	24
	median	1%	6%
Average number of days per patient	*n*	8	22
	median	23.3	21
Percentage of involuntary admissions	*n*	10	15
	median	7%	25%

Note: *n* = number of countries that were able to provide data for that particular item.

Table 2.7 Summary of diagnostic patterns in community-based inpatient units (median %) in the Region and the global sample

Diagnostic patterns	Regional total (n = 11)	Global total
Substance abuse disorders	4	6
Schizophrenia	35	34
Mood disorders	21	18
Neurotic disorders	12	12
Personality disorders	2	2
Other	15	14

Regarding diagnostic patterns in community-based psychiatric inpatient units, a third of users are diagnosed with schizophrenia, a fifth (21%) with mood disorders, and about 15% with "other" conditions. Other diagnoses include epilepsy, organic mental disorders, mental retardation, behavioural and emotional disorder with onset in childhood and adolescence, and psychological development disorders. Neurotic disorders constitute 12% of diagnoses (Table 2.7). Substance abuse accounts for approximately 4% and personality disorders account for 2% of the whole sample (n = 11).

With respect to the composition of the staff, nurses constitute the largest proportion of the staff in community-based psychiatric inpatient facilities (Figure 2.13).

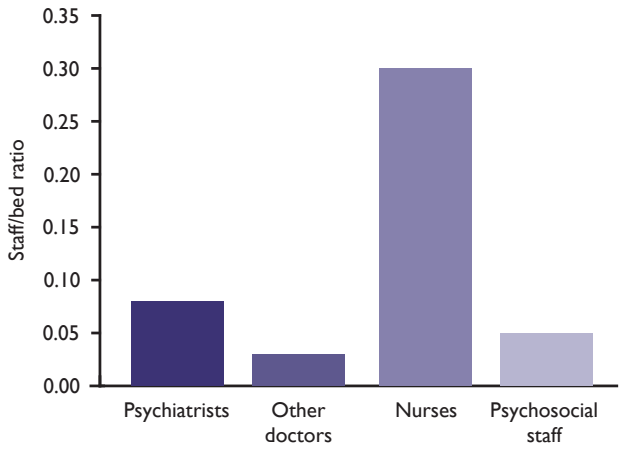

Figure 2.13 Ratio of staff to beds in community-based psychiatric units (n = 11)

Countries were asked about the percentage of community-based inpatient units that collect basic mental health information. This includes information on: number of beds, admissions, days spent, diagnoses, number of involuntary admissions, and number of users restrained or secluded. While 0% of inpatient units collect data on involuntary admissions, restraint, and seclusion, 100% collect data on beds, admissions diagnoses, and days spent in inpatient units

Mental hospitals

A mental hospital is a specialized hospital that provides inpatient care and long-term residential services for people with mental disorders. Usually these facilities are independent and standalone, although they sometimes have some links with the rest of the health care system. Djibouti is the only country that does not have a mental hospital. The median rate of beds for the total sample is 5.37 per 100 000 population (Figure 2.14).

In countries reporting, the number of mental hospital beds had increased by 7% in the past five year. With respect to this indicator, there were significant differences between emergency and non-emergency countries. Emergency countries saw a two-fold increase in the number of mental hospital beds (18%; n = 4) compared to that in non-emergency countries (7%; n = 6).

The rate of mental hospital users is 25.5 per 100 000 population for the total sample (Figure 2.15). The rate of users in mental hospitals varies by income group, with the number of users increasing as country resources increase. The low-income countries have a rate of 11.9, whereas the lower middle-income countries have a rate of 28.7, and the high-income country has a rate of 32.6. Countries facing different emergency situations also differ: the rate of users is 18.0 for emergency countries compared to 32.5 for non-emergency countries.

Thirty four per cent (34%) of patients treated in mental hospitals are women, while a mere 1% are children and adolescents. For the whole sample, the number of days (1456) spent in mental

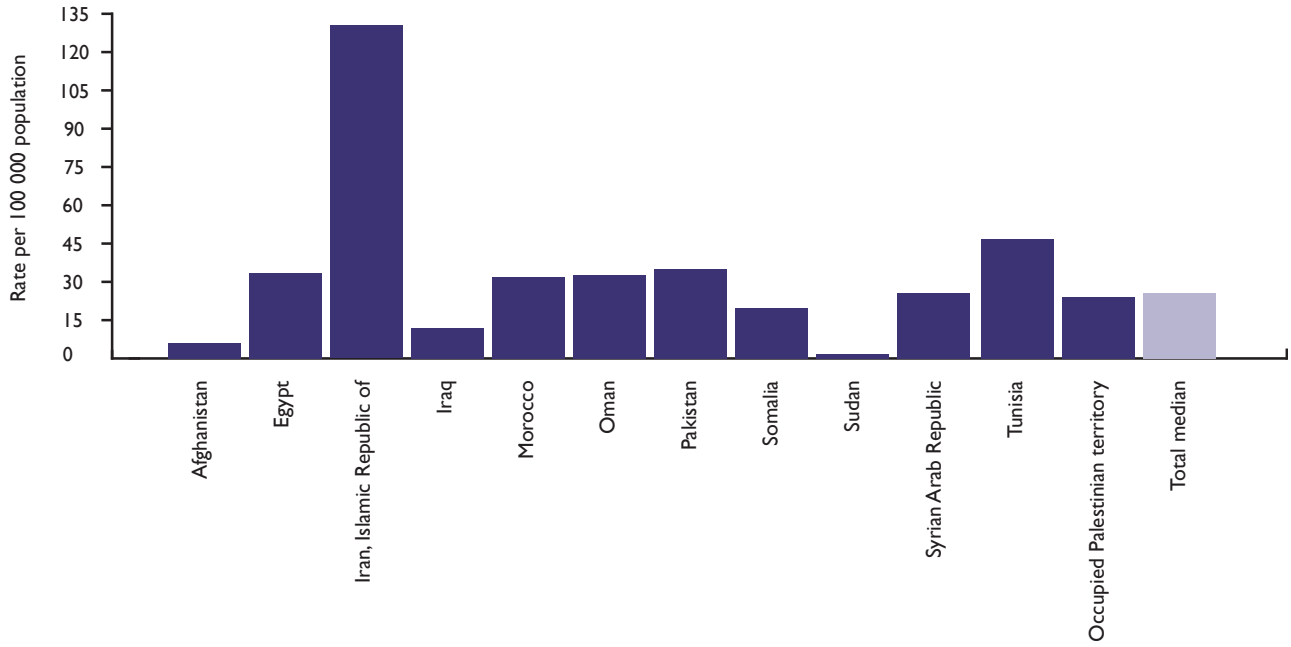

Figure 2.14 Beds in mental hospitals (rate per 100 000 population) for each country (*n* = 12)

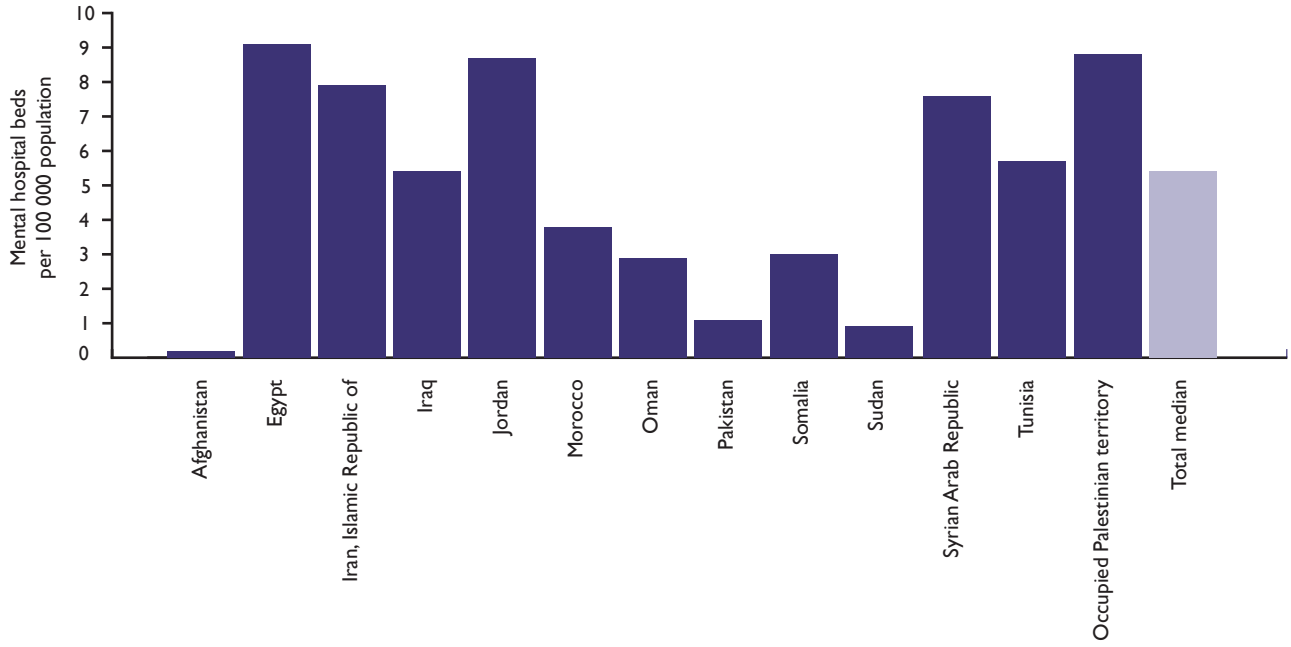

Figure 2.15 Patients treated in mental hospitals (rate per 100 000 population) for each country (*n* = 13)

hospitals per 100 000 population is intermediate as compared to the global sample (*8*). The average number of days spent in mental hospitals in the Region is 58 (Figure 2.16).

The level of occupancy in mental hospitals is within the lower range of 75%. Overall, the majority of patients treated in mental hospitals stay less than 1 year and only one tenth stay longer than 5 years (Table 2.9).

The rate of mental hospitals and population served by one facility differs significantly according to a country's emergency status. Specifically, in countries facing emergency situations one mental hospital serves 16 million people, whereas in

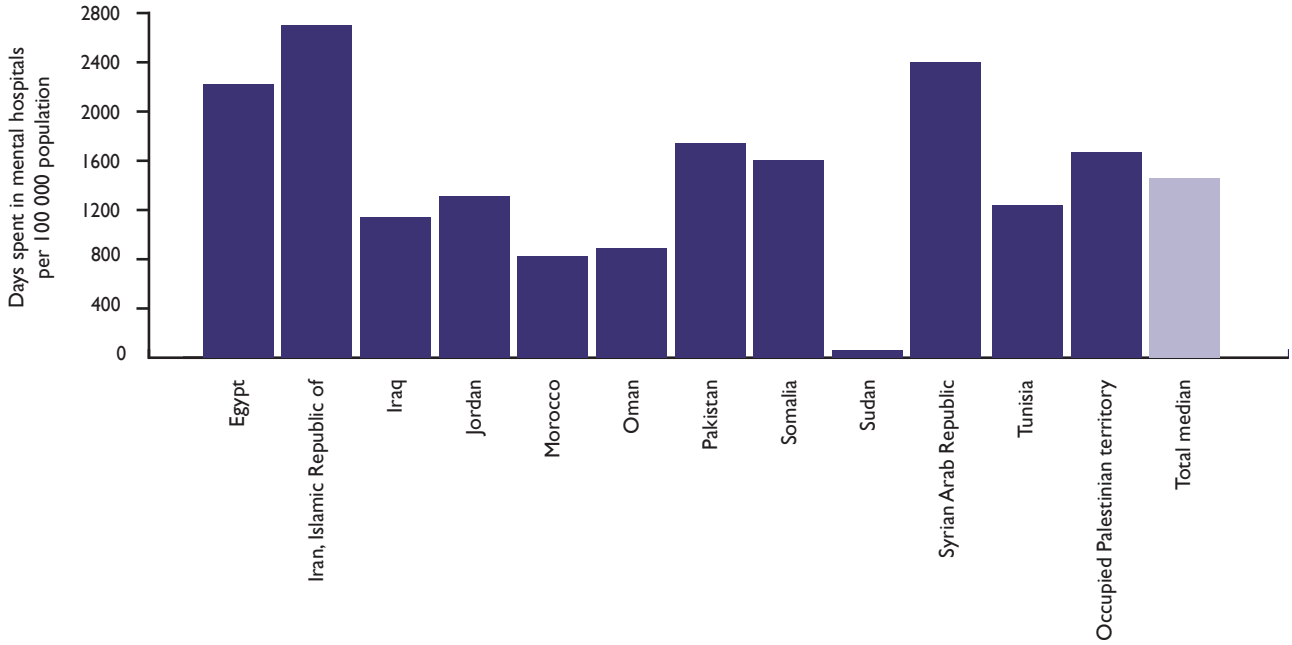

Figure 2.16 Days spent in mental hospitals (rate per 100 000 population) (*n* = 12)

non-emergency situations, one facility serves 3 million. There are also fewer units per 100 000 population in emergency situations (3.22) as compared to non-emergency situations (7.74).

In the 12 countries that reported data on involuntary admissions, 40% of admissions in mental hospitals are involuntary.

Data on physical restraint and seclusion in mental hospitals were not reported by four countries because the data were unknown. Among the remaining 10 countries, 33% reported that seclusion and physical restraint are applied to 5% or less of patients, while 67% of the countries reported that they are applied to more than 5% of patients.

Close to half of the patients staying in mental hospitals suffer from schizophrenia, one fifth from mood disorders, and close to one tenth from "other" disorders (Table 2.10). The "other disorder" category includes the following disorders: epilepsy, organic mental disorders, mental retardation, behavioural and emotional disorders with onset in childhood and adolescence, and psychological development disorders.

Nurses constitute the largest proportion of professional staff working in mental hospitals (Figure 2.17). In the Region, there is one psychiatrist per 100 beds, one nurse per three beds, and one non-psychiatrist medical doctor or psychosocial staff worker per 33 beds.

Basic mental health information on the number of beds, admissions, diagnoses, and days spent in hospital is collected in all mental hospitals (Table 2.11). However, fewer mental hospitals collect information on involuntary admissions and almost no facilities collect data on physical restraint and seclusion.

Community residential facilities

A community residential facility is a non-hospital community-based mental health facility that provides overnight residence for people with mental disorders. Usually these facilities serve users with relatively stable mental disorders who do not require intensive medical interventions. Only three countries have such facilities. One country was not able to confirm the presence of such facilities.

Table 2.9 Summary of indicators for mental hospitals (median) for the Region and for the global sample

Indicator		Regional total	Global total
Number of mental hospitals per 100 000 population	*n*	14	42
	median	0.02	0.03
Percentage of mental hospitals organizationally integrated with mental health outpatient facilities	*n*	13	36
	median	100%	100%
Population served by one mental hospital	*n*	13	36
	median	3 627 600	3 349 980
Number of beds per 100 000 population	*n*	13	42
	median	5.37	5.94
Change in beds in the last 5 years (%)	*n*	13	36
	median	7%	0%
Percentage of beds for children/adolescents only	*n*	12	42
	median	0%	0%
Percentage of child/adolescent patients	*n*	10	33
	median	0.8%	4%
Percentage of women patients	*n*	13	32
	median	32%	38%
Average no. of days spent in mental hospitals	*n*	12	31
	median	58.3	61.1
Occupancy rate (%)	*n*	12	32
	median	75%	80%
Percentage of patients staying less than 1 year (%)	*n*	11	28
	median	77%	66%
Percentage of patients staying 1–4 years	*n*	11	28
	median	8%	7%
Percentage of patients staying 5–10 years	*n*	10	28
	median	3%	7%
Percentage of patients staying more than 10 years	*n*	10	28
	median	7%	5%
Percentage of involuntary admissions	*n*	12	24
	median	40%	36%

Table 2.10 Percentage of disorders treated in mental hospitals (median %)

Disorder	Regional total	*n*	Global total
Substance abuse disorders	8	12	5
Schizophrenia	46	13	46
Mood disorders	22	13	18
Neurotic disorders	2	12	2
Personality disorders	2	12	2
Other	9	12	11

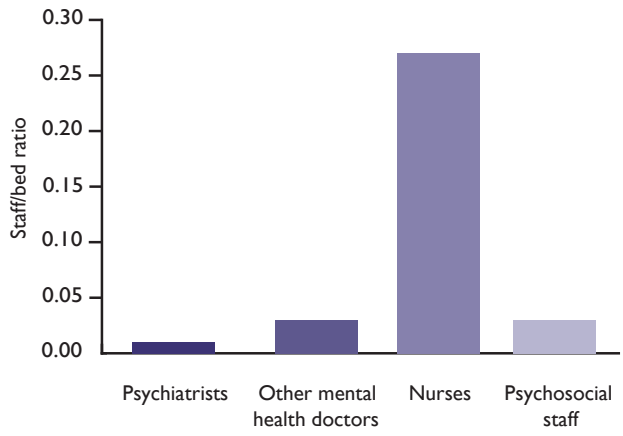

Figure 2.17 Staff/bed ratio of different professional staff in mental hospitals, by country income group (*n* = 13)

Table 2.11 Information collection in mental hospitals (median %)

Information	Total	*n*
Beds	100	13
Admissions	100	13
Diagnoses	100	13
Days	100	13
Involuntary admissions	70	10
Restraint and seclusion	0	10

Concerning the rate of beds in these facilities, the median value is 1.98 per 100 000 population for the three countries that have these facilities (Figure 2.18).

Community residential facilities are clearly committed to patients who are long-term residents, as evidenced by the average number of days spent per patient (Table 2.12). The average period spent in community residential facilities is 183 days in the reporting countries (n = 2). One of the three countries with residential facilities was not able to provide this information.

The number of days spent in community residential facilities per 100 000 population is 1022 (n = 2). However, it should be noted that only two of the 14 countries provided data on these last two items. Many countries did not respond to this item because they do not have community residential facilities. Thus, the results should be interpreted with caution.

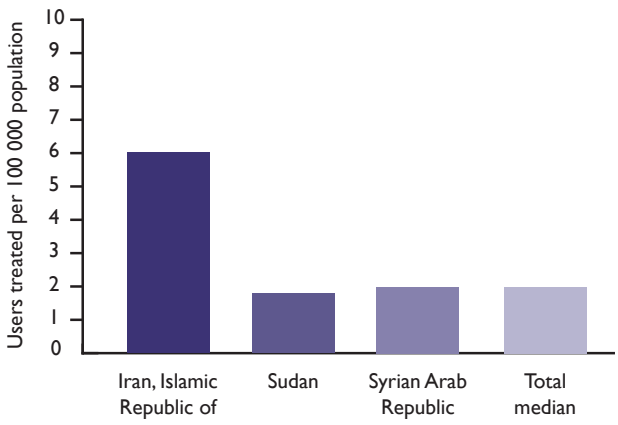

Figure 2.18 Patients treated in community residential facilities (rate per 100 000 population) for the three reporting countries

Table 2.12 Summary of indicators on community residential facilities (median) for the Region and the global sample

Indicator		Region total	Global total
Number of residential facilities per 100 000 population	*n*	13	38
	median	0	0
Population served by one facility	*n*	3	15
	median	900 000	1 563 681
Number of beds/places per 100 000 population	*n*	3	38
	median	1.75	0
Percentage of beds/places for children/adolescents only	*n*	2	38
	median	0%	0%
Percentage of women users	*n*	3	13
	median	43%	51%
Percentage of child/ adolescent users	*n*	3	14
	median	37%	0%
Average days spent per 100 000 population	*n*	2	13
	median	1022	298
Average length of stay	*n*	2	12
	median	184	333

Forensic inpatient units

A forensic inpatient unit is a psychiatric inpatient unit that is maintained exclusively for the evaluation or treatment of people with mental disorders who are in the criminal justice system. These units can be located in mental hospitals, general hospitals, or elsewhere. Of the reporting countries, eight have such units and one country was not able to confirm the existence of such units.

The median rate of beds in forensic units is 0.57 beds per 100 000 population. This means that forensic beds are rare, with about 1 bed per 200 000 population. With respect to length of stay, one quarter of inpatients stay for less than 1 year and one fifth stay for less than 4 years (Figure 2.19).

Most forensic beds (50%) are located in specialized units in mental hospitals. Only one country (Sudan) has all its 200 forensic beds in prisons.

Other residential facilities

The term "other residential facilities" refers to facilities that house people with mental disorders, but that do not meet the WHO-AIMS definition

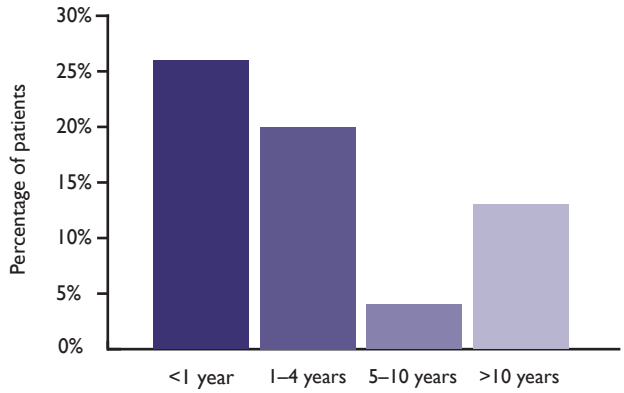

Figure 2.19 Length of stay in forensic facilities (median %) (*n* = 8)

for community residential facility or any other mental health facility. WHO-AIMS assesses other residential facilities for specific disorders (e.g. mental retardation, substance abuse and dementia), as well as general facilities where the majority of users have diagnosable mental disorders, but are not formal mental health facilities.

The total median rate of beds per 100 000 population in other residential facilities is 1.17 for 10 countries. The rate of beds for youth (17 years and younger) is low: 0.00 beds per 100 000 population. Most countries in the Region do not have beds available for youth, while the global sample has close to 5 beds per 100 000 population (*8*).

The rate of beds designated for specific disorders is low (a median rate of zero beds) in these facilities. These include beds for people with substance abuse problems, dementia, and mental retardation.

2.7 Psychotropic drugs

Psychotropic drugs are an important medical product in the mental health system. They can be used for treating the symptoms of mental disorders, reducing disability, and preventing relapse (*14*). In their essential medicine lists, almost all countries have at least one psychotropic medicine from each of the five categories (antipsychotics, anxiolytics, antidepressants, mood stabilizers and antiepileptic drugs).

Availability of psychotropic medicines in the primary health care system

In only 36% (five out of 14) of the countries are all, or almost all, of the primary care facilities equipped with essential psychotropic medicines, suggesting a rather low integration of mental health and primary care (Table 2.13). This low integration was also apparent in the global sample (*8*).

Availability of psychotropic medicines in community-based inpatient units (general hospitals) and specialist mental health services

In contrast to the limited availability of medication in the primary health care system, psychotropic medicines appear to be more readily available in designated mental health facilities. The median rate of availability of psychotropic medicines in mental hospitals, outpatient facilities, and community-based inpatient units is 100%. This means that in half or more of the participating countries, all mental hospitals, outpatient facilities, and community-based inpatient units have at least one psychotropic medicine from each therapeutic class available in the facility or in a nearby pharmacy throughout the year.

There is considerable variability in the number of facilities across countries. Hence, the percentages signified different degrees of availability of medication. For example, one country reported

Table 2.13. Psychotropic medicines available in physician-based primary health care

Percentage of physician-based primary health care clinics with available medicines (%)	Number of countries
0%	2 Egypt, Sudan
1%–20%	4 Afghanistan, Djibouti, Iraq, Pakistan
21%–50%	1 Somalia
51%–80%	2 Morocco, Oman
81%–100%	5 Islamic Republic of Iran, Jordan, Syrian Arab Republic, Tunisia, occupied Palestinian territory

having medicines available in 41% of its 855 outpatient facilities. Another country reported having medicines available in 34% of its 624 inpatient units and in 33% of its 3729 outpatient facilities.

2.8 Mental health workforce

Health workers are people engaged in work the primary purpose of which is to protect and improve health. They may work in the private or public sector and include both the lay and professional cadres. Adequate and well trained human resources are needed both in primary care and at the specialist level. There is a strong relationship between the density of health professionals, service coverage, and health outcomes (*9*). Ideally, mental health teams should include medical and non-medical professionals such as psychiatrists, clinical psychologists, nurses, social workers and occupational therapists.

Number of human resources

The total median rate of mental health professionals per 100 000 population working in mental health facilities is 3.3 (Figure 2.20), which is lower than the global rate of 6.0 (*8*). This includes mental health staff working in government administered and private for-profit mental health facilities, as well as those run by nongovernmental organizations.

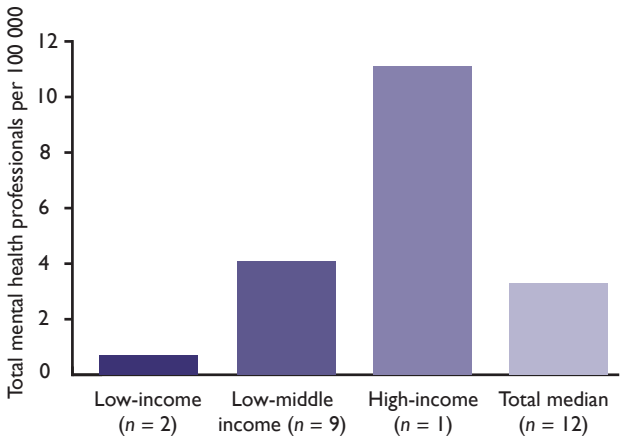

Figure 2.20 Mental health professionals working in mental health facilities (median rate per 100 000 population), by income category of country (*n* = 12)

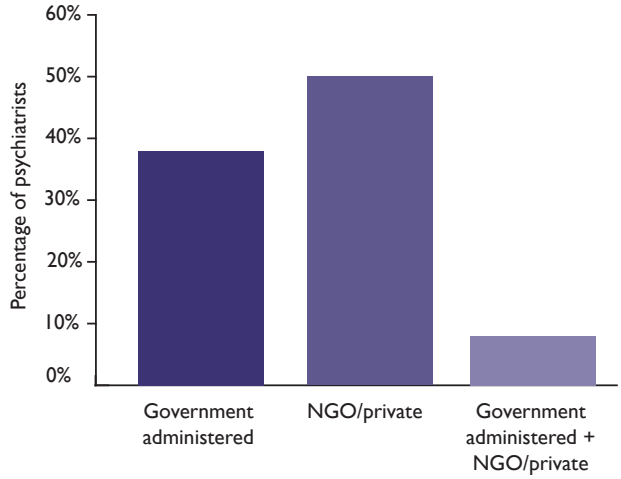

Figure 2.21 Percentage of psychiatrists working in various mental health sectors (*n* = 13)

For this item, there were differences based on income: low-income countries have a low rate of about 1 professional per 100 000 population working in mental health facilities; lower middle-income countries have four; and the high-income country has 11. These income trends are similar to those of the global sample (*8*).

Median rates for each professional category per 100 000 population are as follows: 0.6 psychiatrists, 0.1 psychologists and occupational therapists, 0.2 social workers, and 0.5 other mental health workers.

In addition to the total number of professionals, countries reported on the sectors in which they work: public, private, or a combination of the two. There are more psychiatrists working in the private sector (median of 50%) than in the public sector (median of 38%) (Figure 2.21). This distribution does not follow global trends (*8*).

Training of primary health care professionals

Primary care is the first line of care for people with mental disorders. Thus, it is critical that primary health care staff be trained to diagnose and treat mental disorders. However, results suggest that little undergraduate training on mental health is provided to primary health care professionals in the Region. Specifically, as a proportion of total training hours, the median rate of hours devoted

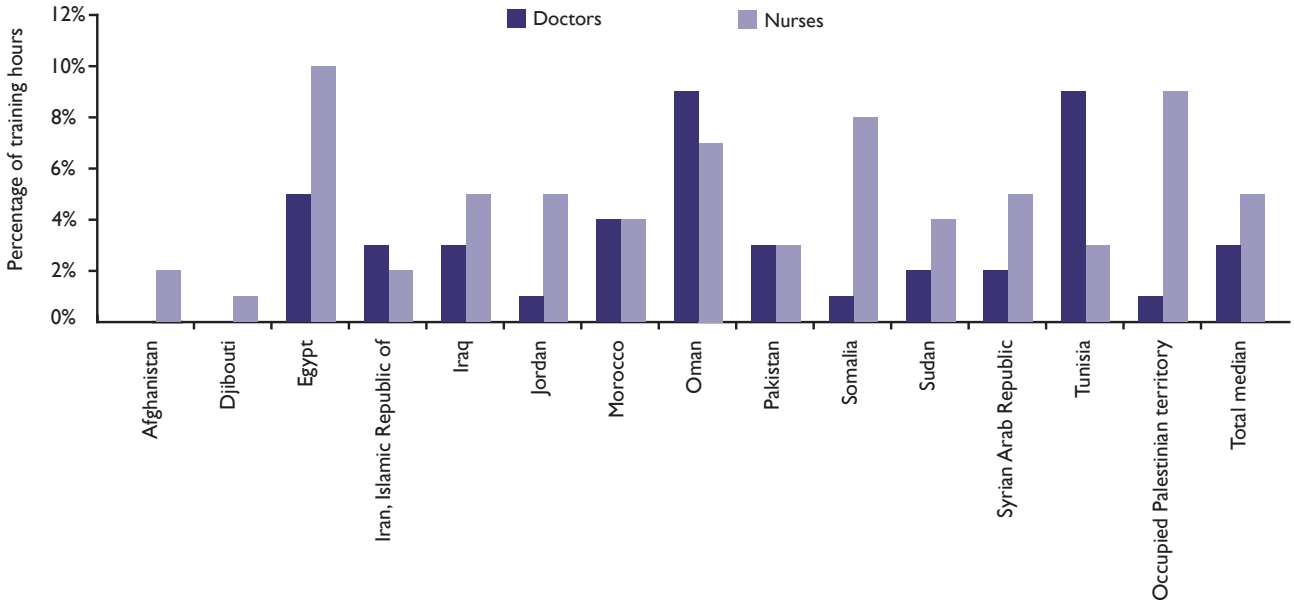

Figure 2.22 Percentage of undergraduate training hours devoted to mental health for each country (*n* = 13/14)

to mental health is 3% for doctors and 5% for nurses for the whole sample (Figure 2.22). This is similar to the global situation (*8*).

The total number of professionals graduating in the mental health sector in the year prior to the reporting period was 6.5 per 100 000 population (Figure 2.23). There were some clear differences based on a country's income: a low number of professionals (3.7) graduated in low-income countries, compared to 7.3 in the lower middle-class countries, and 23.4 in the high-income country. This trend is the same for nurses, with 2.2. in the low-income countries, 5.8 in the lower middle-income countries, and 20.2 in the high-income country.

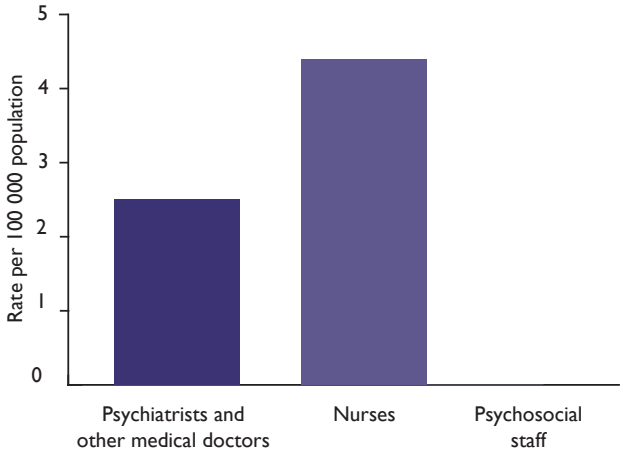

Figure 2.23 Mental health professionals graduating in the last year in academic and educational institutions, median number per 100 000 population (*n* = 11)

In participating countries, nurses receive more mental health training than medical doctors. The greater number of training hours for nurses may be due to the fact that many nurse training programmes include classes on applied social and behavioural sciences, as nurses are often required to deal with behavioural issues and problems regardless of their area of specialization. For example, nursing programmes often have seminars focused on how to talk to and provide support to patients. That being said, it is unclear whether the greater number of training hours devoted to mental health for nurses reflects specific training on helping people with mental disorders or broader psychosocial training.

At the time of questioning, few doctors and nurses had received recent refresher training, which is defined as 2 days (16 hours) of in-service training provided by facilities , as well as earning continuing education credits provided by professional organizations on specific topics. Although doctors receive less training in mental health than nurses at the undergraduate level, they

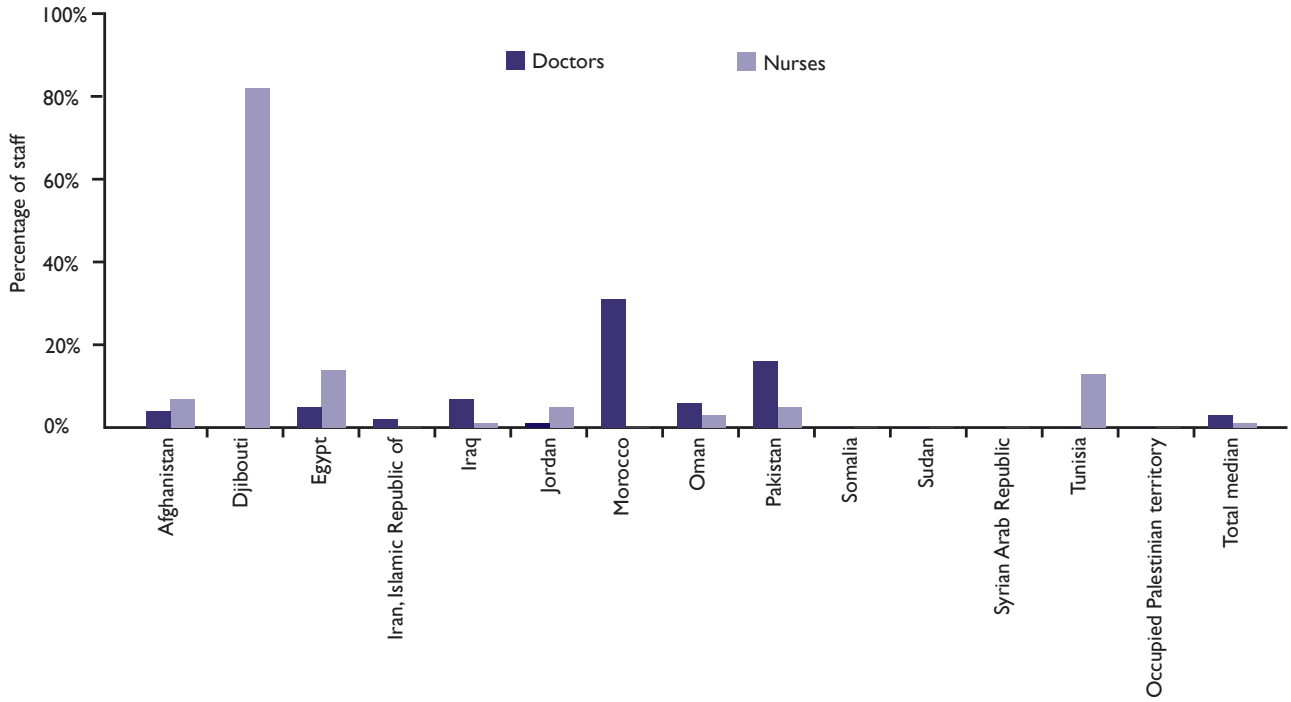

Figure 2.24 Percentage (%) of medical doctors and nurses who received two days of refresher training in mental health (*n* = 13/14)

receive more refresher training. Refresher training occurs after university or vocational school. The median rate of refresher training (i.e. at least two days of training within the past year) for doctors in the reporting countries was 3% in comparison to less than 1% for nurses (Figure 2.24). These percentages follow global trends (*8*).

Djibouti provides refresher training to the majority of its nurses, while Somalia, Sudan, and Syria train neither doctors nor nurses (the occupied Palestinian territory did not have this information for nurses). The median rates of refresher training for mental health professionals range between 0% and 10% (Figure 2.25).

2.9 User/consumer and family associations

As a whole, the Region has few user/consumer and family associations in comparison to the global sample (*8*). Of the 14 reporting countries, four have user/consumer associations and five have family associations (Figure 2.26).

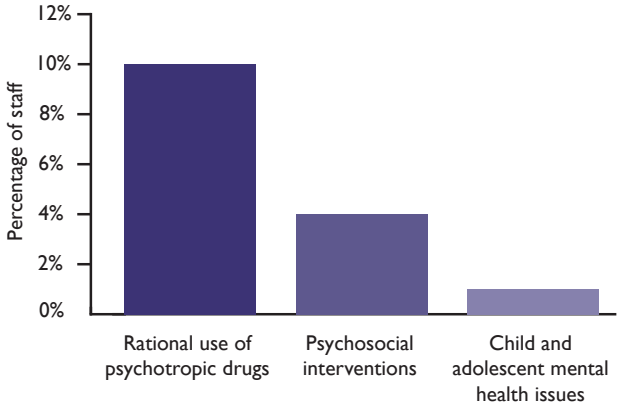

Figure 2.25 Refresher training for mental health staff (median %) (*n* = 9)

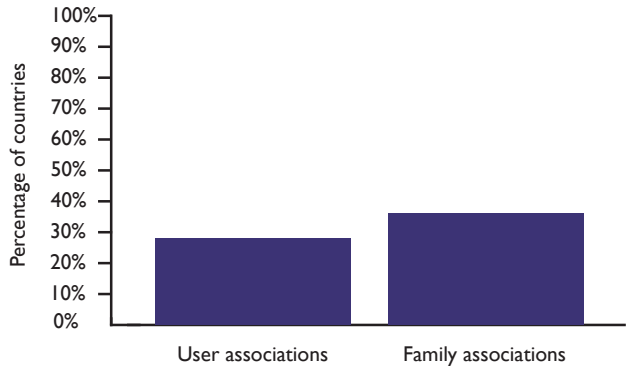

Figure 2.26 Percentage of countries with user/consumer and family associations (*n* = 4/*n* = 5)

Two countries were not able to confirm the presence of user/consumer associations in their country and three countries were not able to provide this information for family associations. For the five countries with family associations, the number of members varies substantially, with one country (Islamic Republic of Iran) reporting up to 500 members and another country (Pakistan) reporting only six members.

Although there is a shortage of family and user/consumer associations in the Region, it must be recognized that the few that do exist are involved in community and individual assistance activities. Of the four countries with user/consumer associations, three provide community and individual assistance. All five countries with family associations provide community and individual assistance.

Regarding the presence of nongovernmental organizations, countries reported a median of one nongovernmental organization involved in policy, legislation or mental health advocacy and a median of four involved in community and individual assistance activities.

3. Desirable attributes of mental health systems

In addition to the building blocks discussed in Section 2, mental health systems require several other attributes to function well (*9*). The WHO health systems framework identifies four areas of importance for a well functioning general health care system, which are equally relevant to the mental health care system. These attributes are: access, coverage, quality and safety. WHO-AIMS is designed to collect information on process and structural indicators (*9,15*), so information on quality and safety was not collected. There are also other attributes important to mental health systems that are not covered in the WHO health systems framework. For example, a well functioning mental health system needs to have strong links or connections to other health and non-health systems (e.g. the primary health care and social welfare systems) and human rights must be protected. This section addresses some of the areas of concern listed in the WHO health systems framework, as well as other key areas identified by WHO-AIMS. The areas addressed are:

- efficiency
- coverage
- access and equity
- mental health system linkages
- human rights.

3.1 Efficiency

In assessing efficiency (i.e. cost-effective use of resources), one of the most important factors to consider is the extent to which services are community-based (*16*). A number of WHO-AIMS items and indices serve to assess the extent to which mental health resources are directed towards community-based mental health facilities versus towards mental hospitals. In addition to using some standard WHO-AIMS indicators, other indicators have been transformed or aggregated to create standardized measures for facilitating comparisons among countries. (For example, the Lund-Flisher parameter – the ratio of outpatient contacts to number of days spent in hospital – has been developed to provide an estimate of the extent to which a mental health system is community or hospital-based) (*17*).

Distribution of financial resources between community-based and institutional facilities

Member States were asked to indicate the proportion of their mental health funds allocated to mental hospitals. The Region devotes 50% of its total mental health expenditures to mental hospitals (Figure 3.1). Although the Region's expenditures on mental hospitals are high, they are still 30% lower than the median reported by the global sample (*8*). There is considerable variation between countries, with the Syrian Arab Republic devoting the most resources to mental hospitals and Pakistan devoting the least.

Distribution of services between community-based and institutional facilities

The distribution of beds between mental hospitals and other facilities is an important characteristic of a mental health system. In the entire sample, the proportion of beds located in mental hospitals is high: on average about six beds in 10 (64%) are located in mental hospitals (Figure 3.2). The global percentage is 8 beds in 10 (*8*).

Only 7% of all users of all mental health facilities in the Region are treated in mental hospitals (Figure 3.2), which is consistent with the global percentage (*8*). When the data on beds and patients are considered together, it is apparent that – although the majority of beds are located in mental hospitals – these beds account for care provided to only a small proportion of the total number of users of all mental health facilities. This disparity is greatest in Egypt and Jordan.

Two key indicators for evaluating a mental health system are: inpatient beds (as measured by the total rate of inpatient beds per 100 000 population in mental hospitals, community-based inpatient units, and community residential facilities) and community-based facilities (as measured by the rate of outpatient and day treatment facilities per 100 000 population).

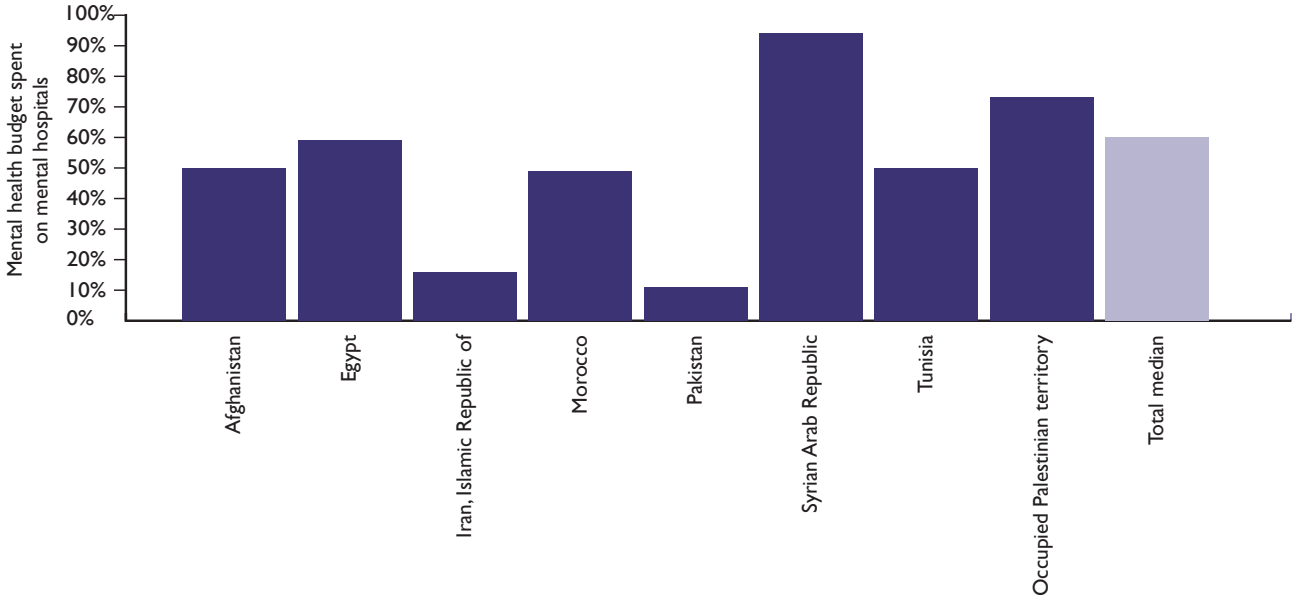

Figure 3.1 Percentage of the mental health budget spent on mental hospitals by each country and median for the whole sample (n = 8)

The median rate of beds for the Region is 6.4 per 100 000 population, which is slightly lower than the global rate of 8.2 (*8*). The median rate of community-based facilities (outpatient and day treatment) for the Region is 0.2 (n = 14), while the global rate is 0.4 per 100 000 population. Afghanistan and Islamic Republic of Iran have a higher rate of inpatient beds in comparison to their community-based facilities, whereas Pakistan has a higher rate of community-based facilities in comparison to inpatient beds (Figure 3.3).

The ratio of the rate of beds in mental health services to the rate of outpatient and day treatment facilities can be seen as a rough indicator of the balance between inpatient and outpatient facilities at the system level. The study reveals that there are 49 inpatient beds for every outpatient facility (outpatient and day treatment) for the whole

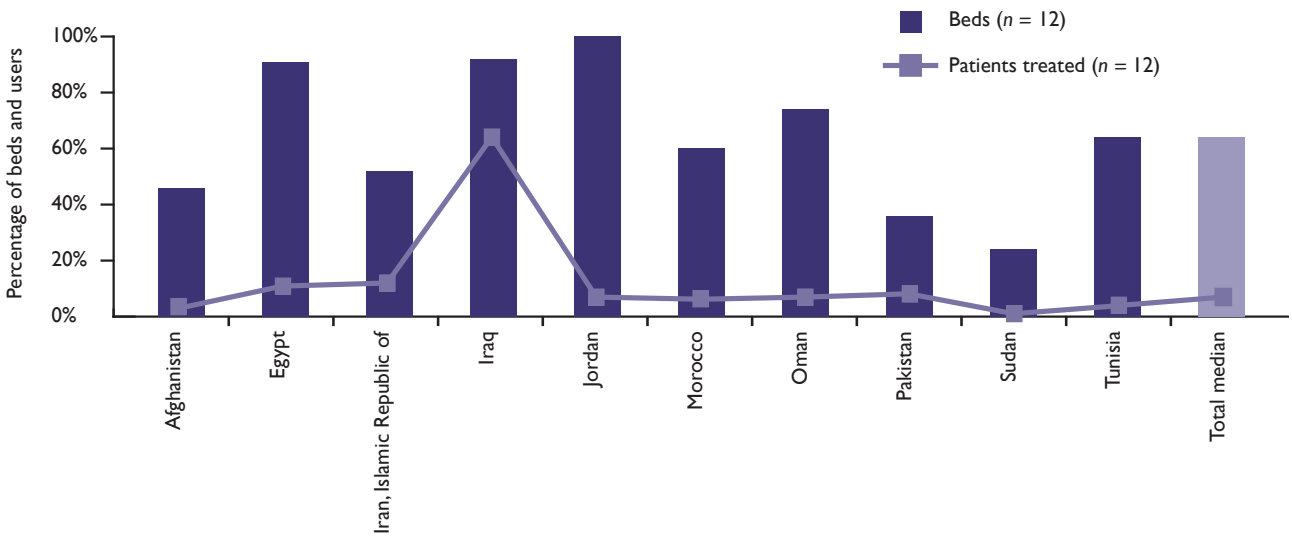

Figure 3.2 Percentage of beds in mental hospitals of total beds and percentage of users treated in mental hospitals of total users treated

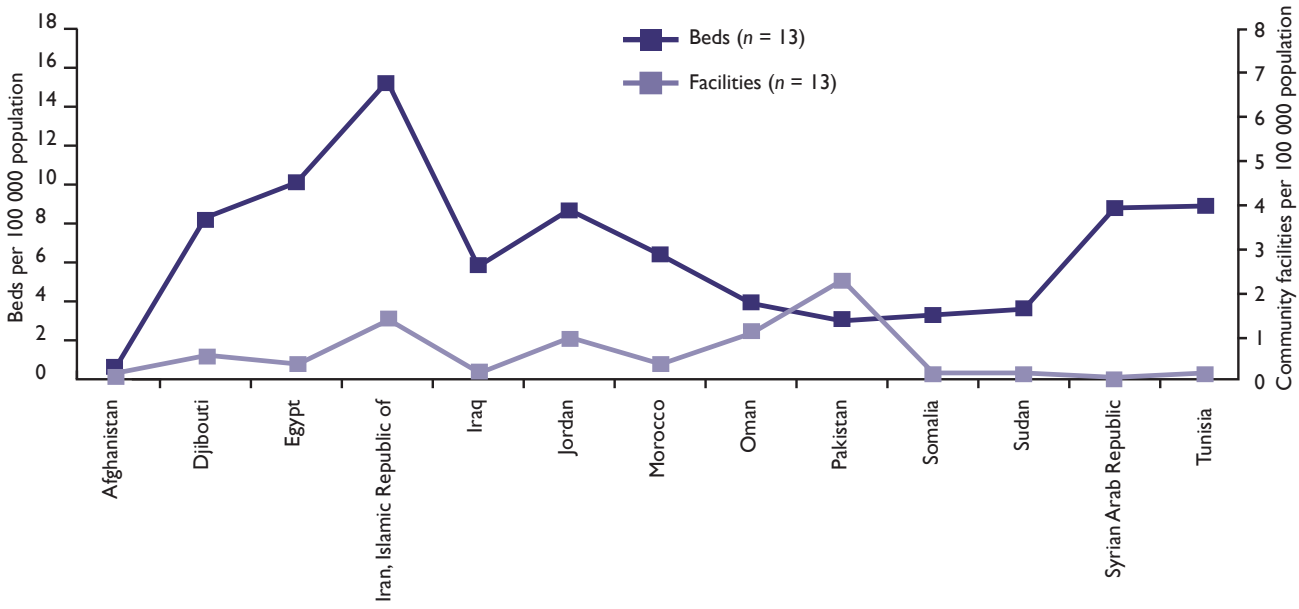

Figure 3.3 Rates of inpatient beds and community facilities (outpatient and day treatment) per 100 000 population for each country

sample (n = 13). With regard to income, the high-income country has a ratio of three inpatient beds for every outpatient facility (outpatient and day treatment); the lower middle-income countries (n = 10) have 49 beds for every outpatient and day treatment facility; and the low-income countries have 18 beds for every outpatient and day treatment facility.

Another indicator of community care is the ratio between outpatient care (outpatient and day treatment contacts) and inpatient care (days spent in all inpatient facilities, e.g. mental hospitals, residential facilities, and general hospital units) (*17*). Results for the total sample suggest that there is one outpatient contact (1.28) per day spent in inpatient facilities (Figure 3.4). Tunisia and Pakistan have more outpatient than inpatient care, while the opposite is true for Egypt and Syrian Arab Republic.

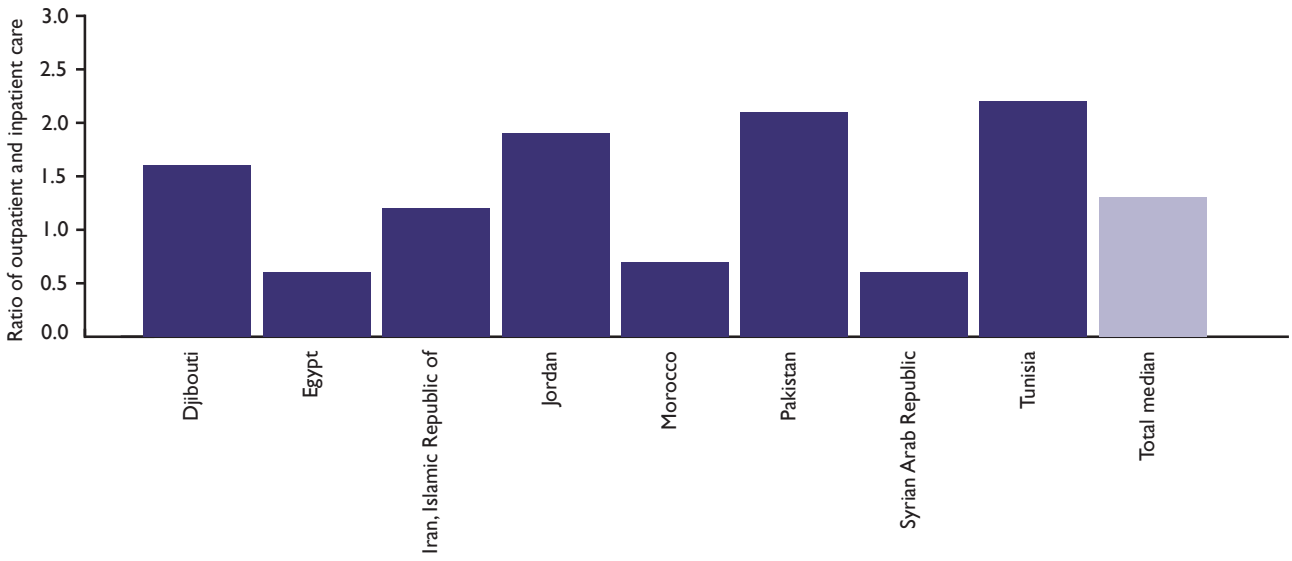

Figure 3.4 Lund and Flisher indicator for each country and median for the whole sample

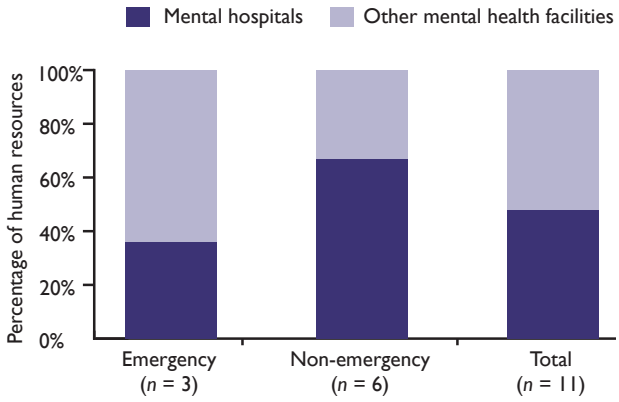

Figure 3.5 Percentage of human resources working in mental hospitals compared to those working in outpatient facilities/inpatient units, by country emergency status

Distribution of human resources between community-based and institutional facilities

In addition to service, it is important to consider the extent to which human resources are concentrated in community-based facilities versus institutional settings. Taking all the reporting countries together, 48% of human resources are concentrated in mental hospitals. This means that in a typical country, close to half of all available mental health staff is concentrated in mental hospitals, leaving the other staff in the remaining facilities (e.g. outpatient and community-based inpatient units). This is higher than that reported by the global sample, in which one third of the human resources work in mental hospitals (*8*).

When considering countries' emergency status, it can be seen that twice as many resources (67%; *n* = 6) are concentrated in mental hospitals in non-emergency countries as in emergency countries (36%; *n* = 3) (Figure 3.5).

3.2 Coverage

Treated prevalence (i.e. coverage) pertains to the total number of people with mental disorders served within the mental health system. The sum of the patients served by the different types of mental health facilities (i.e. outpatient facilities, day treatment facilities, community-based psychiatric inpatient units, community residential facilities and mental hospitals) can be considered a proxy for the treated prevalence in mental health services. However, these figures are probably overestimates, because some patients may have been treated in more than one setting (e.g. a patient may be treated in both a community-based inpatient unit and an outpatient clinic within the same year) and therefore they may have been counted more than once. In any case, the treated prevalence rate for the Region is less than 1% (Figure 3.6), which is low in comparison to the global median rates for severe mental disorders (2%–3%) and mild and moderate mental disorders (10%) (*2*).

The treated prevalence for the whole sample (306) is half that found in the global sample (664), indicating that half as many people in the Region are treated for mental disorders than in the global sample (*8*).

The treated prevalence rate in the Region is even lower for children and adolescents. For all participating countries, the median rate of children treated per 100 000 child and adolescent population is 73, which is substantially lower than the global rate of 159 (*8*).

Treated prevalence rate of schizophrenic disorders

The median rate of schizophrenic patients treated in mental health services for all countries (*n* = 12) is 89 per 100 000 population. This is considerably lower than the rate of 178 found for the global sample (*n* = 25) (*8*).

With respect to patterns of care (i.e. the types of facilities where patients with schizophrenia are most frequently treated), a median of 73% of patients with schizophrenic disorders are treated in outpatient facilities, a median of 6% are treated in inpatient units, and a median of 13% are treated in mental hospitals (Figure 3.7) (*n* = 12). These patterns follow global trends (*8*).

The median rate (per 100 000 population) of patients diagnosed with schizophrenia treated in outpatient facilities is 68.67 (*n* = 12), 5.47 (*n* = 13) in community-based units for inpatient care, and 10.52 (*n* = 14) in mental hospitals.

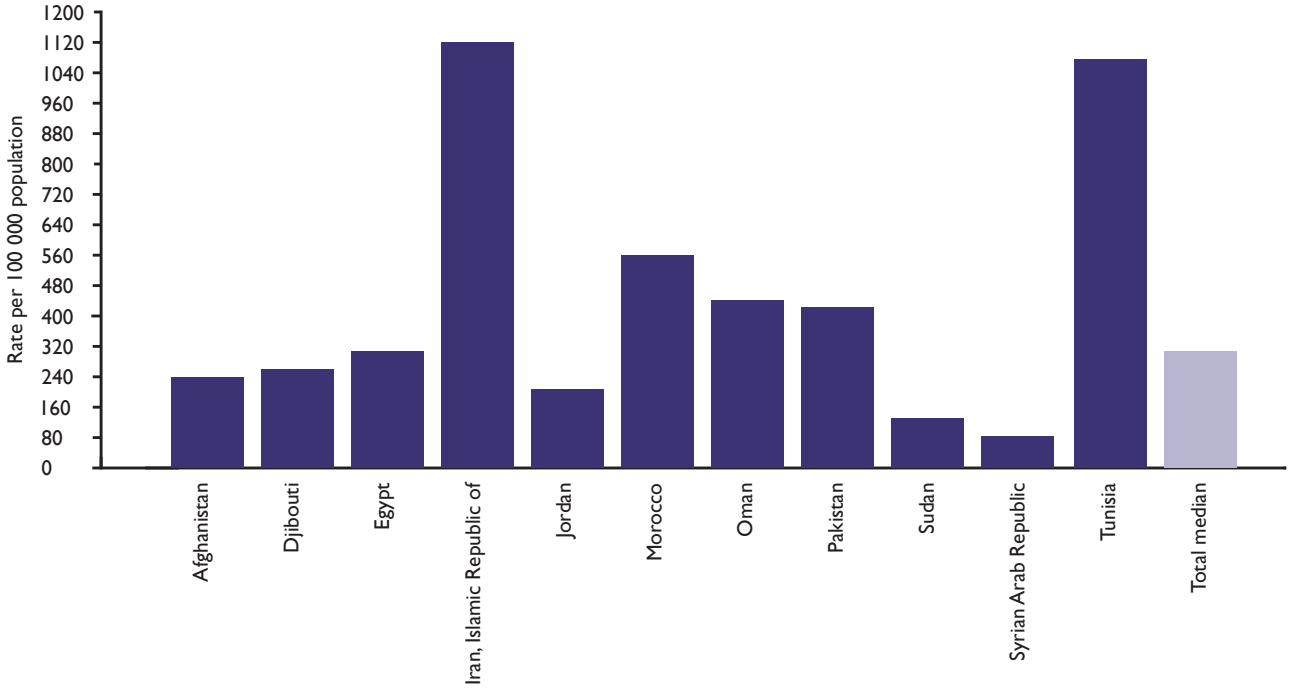

Figure 3.6 Treated prevalence rate (per 100 000 population) for each country (*n* = 11)

Clearly, the majority of schizophrenic diagnoses are treated in outpatient facilities (Figure 3.8).

In order to measure the treatment gap for schizophrenia in the participating countries, a treatment prevalence rate for schizophrenia across all mental health facilities was calculated and compared to the regional prevalence estimate. This estimate for schizophrenia is based on the *Global burden of disease in 2002* (*1*). The regional estimates of the percentage of people with schizophrenia was transformed into a rate per 100 000 by multiplying the global burden of disease prevalence figure by the population of the country and then dividing by 100 000. This figure was compared with the treated prevalence rate for schizophrenia obtained by the current study.

For all participating countries, the median value for this indicator is 0.15, suggesting that only approximately 15% of people with schizophrenia

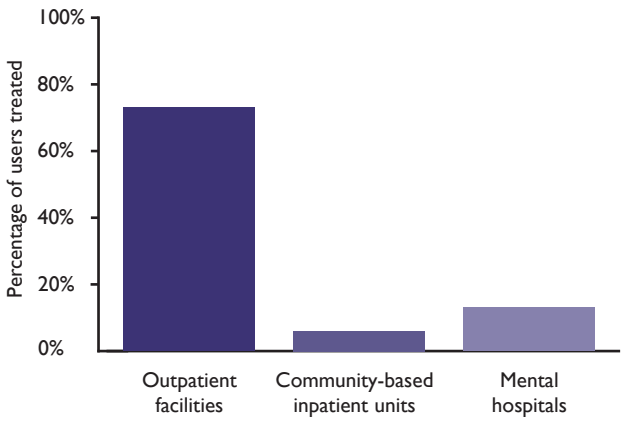

Figure 3.7 Percentage of people with schizophrenic disorders treated in each facility as a proportion of all schizophrenic disorders treated (median %) (*n* = 12)

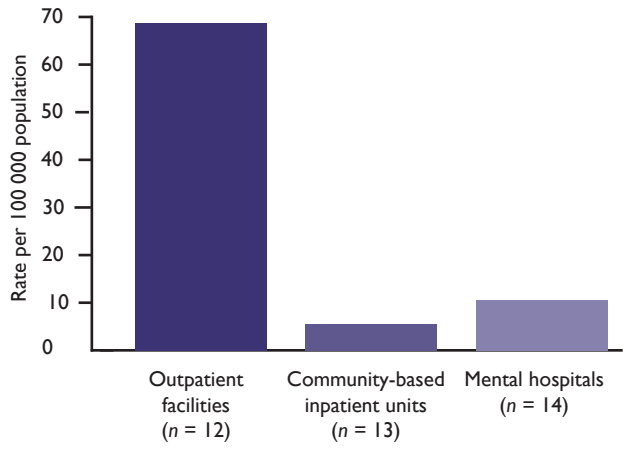

Figure 3.8 People with schizophrenic disorders treated in mental health facilities (median rates per 100 000 population)

are receiving treatment (n = 12). This is a conservative estimate, as patients may have been counted more than once if they were treated in more than one mental health facility (e.g. a mental hospital as well as a community residential facility). Interestingly, a lower proportion of patients in the Region are treated for schizophrenia than in the global sample (30%) (*8*).

Treated prevalence rate and coverage of mood disorders

The median rate of patients treated for mood disorders in mental health services for the total sample is 80.68 per 100 000 population (n = 12). Countries in emergency situations treat twice as many people for mood disorders (97.02 per 100 000; n = 4) as countries in non-emergency situations (47.42 per 100 000; n = 6).

Close to nine out of 10 patients with mood disorders receive treatment in outpatient facilities. In contrast, one in 20 patients with mood disorders receives inpatient care both in community-based inpatient units and mental hospitals (Figure 3.9).

When considering the median rate, 79 patients per 100 000 population are treated for mood disorders in mental health outpatient facilities, compared to four patients in mental hospitals and three in inpatient units (Figure 3.10).

There were no differences in the median rate of patients treated for mood disorders in inpatient care and mental hospitals based on countries' emergency status. However, in outpatient facilities, countries in emergency situations treat more than twice as many patients with mood disorders (90 per 100 000 population; n = 4) as countries in non-emergency situations (39 per 100 000 population; n = 6).

The treated prevalence rate for mood disorders across all mental health facilities was calculated and compared with the subregional treated prevalence rate estimate for mood disorders based on the *Global burden of disease in 2002* (*1*). The subregional estimate of the percentage of people with mood disorders was transformed into a rate per 100 000 by multiplying the global burden of disease prevalence figure by the population of the country and then dividing the result by 100 000. This figure was compared to the treated prevalence rate for mood disorders obtained in this study.

The median value of this indicator for all participating countries was 0.02 (the same as for the global sample), suggesting that only approximately 2% of people with mood disorders receive treatment in the mental health system. There are a few possible explanations for the particularly low coverage rate found. First, many countries reported that mood disorders tend to be under-diagnosed in their countries. Second, users with mild and moderate forms of mood disorders may receive treatment in the primary health care

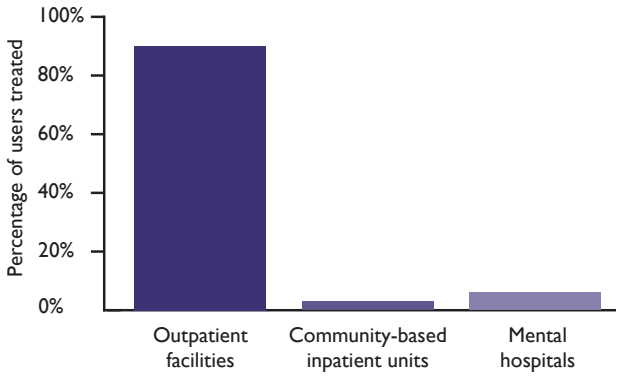

Figure 3.9 Percentage of people with mood disorders treated in each facility as a proportion of all mood disorders treated (median %) for the total sample (n = 12)

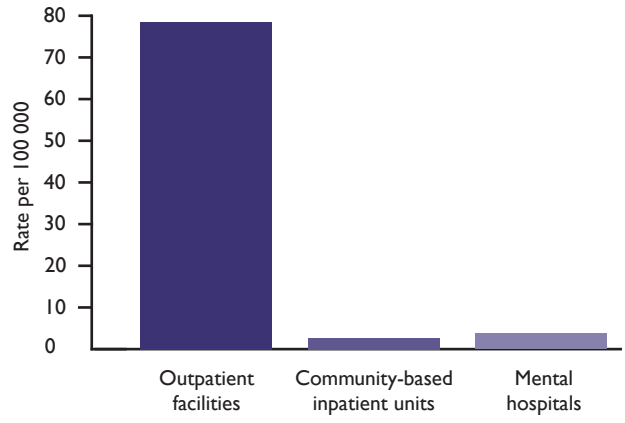

Figure 3.10 People with mood disorders treated in mental health facilities (median rates per 100 000 population) for the total sample (n = 12)

system, which is not covered by this item. Finally, not all people with mild forms of mood disorders necessarily require treatment (*18*).

3.3 Access and equity

Location of mental health facilities

Certain groups within a country typically have greater access to mental health services than other groups. Groups with less access are usually rural populations, minority groups and poor populations.

Psychiatric beds are generally concentrated in or near the largest cities, which limits rural users' access to mental health services. For this reason, the density of beds per 100 000 population in a country's largest city was compared to the density of beds per 100 000 population for the entire country. The median value for this indicator for all participating countries was 3.15, which is close to the value for the global sample (2.9) (*8*). This suggests that in most countries the density of beds in the largest city is three times greater than the density of beds in the entire country (Figure 3.11).

Regarding income, low-income countries have an even less equitable distribution of beds (with a bed density almost six times greater in the largest city) than lower middle-income countries (three times greater) and high-income countries (four times greater). Such inequitable distribution implies lower access to treatment for those who live outside the main cities, especially for countries with fewer economic resources (Figure 3.11).

Countries that are facing emergency situations have a bed density that is five times higher in urban settings than in rural areas, while non-emergency countries have a bed density that is two times higher in urban settings. Hence, on this indicator, there is inequity in the distribution of beds in both country groups, but there is relatively more inequity in countries facing emergency situations.

Across the sample, the rate of psychiatrists and nurses working in the largest city is double that of psychiatrists and nurses working in the entire country (ratios of 2.0 and 2.3, respectively). This is also the case in the global sample (*8*). This value was calculated by comparing the rate of staff per 100 000 population in the largest city to the rate for the entire country. There are data missing on the number of psychiatrists working in the largest city, which precluded analyses based on income level; however, there are enough data on nurses available to compare the three income groups. There appears to be a negative relationship between the income level of a country and the concentration of nurses in urban areas (Figure 3.12), with higher concentrations of nurses in cities in low-income countries. Specifically, the two low-income countries in the sample have a

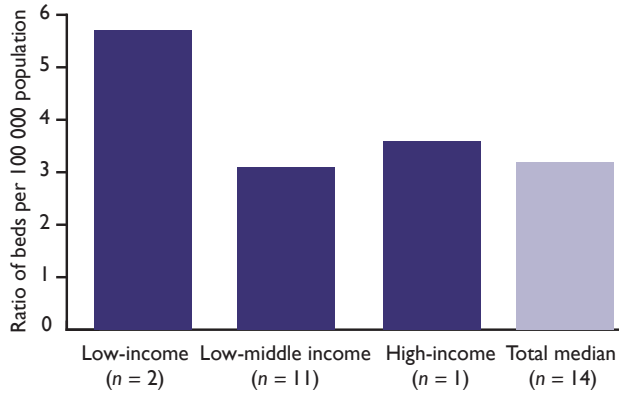

Figure 3.11 Ratio of psychiatric beds located in or near the largest city to beds in the entire country, by country income group (median)

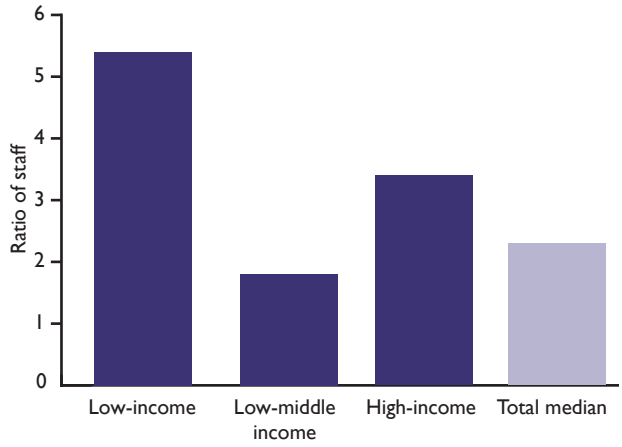

Figure 3.12 Ratio of nurses working in or near the largest city to those working in the entire country, by country income group (*n* = 14)

density of 5.35, while the high income country has a concentration of 3.42.

Affordability of mental health care

Another factor influencing the extent to which mental health care is accessible to the population is its affordability. If mental health care is unaffordable to a certain portion of the population, the result is inequitable access to mental health care for those users. Social insurance schemes constitute one source of funding that facilitates access to care. In such a scheme, those earning above a certain level of income are required to transfer a fixed percentage of their income to a government administered health fund. In return, the government pays for part or all of mental health care. The results show that most participating countries have social insurance schemes, while 36% (n = 5) do not (Table 3.1).

The extent to which the population has free access (at least 80% of the cost is covered) to essential psychotropic medicines was also assessed. The median for the total sample (n = 12) is 67% (Figure 3.13).

A greater proportion of people have free access to essential psychotropic medicines in the high-income country (median = 100%) and in lower middle-income countries (median = 80%) than in the low-income countries (median = 15%). Many countries were not able to provide precise figures for this item and based their data on a "best estimate", so these findings should be interpreted with caution.

Table 3.1 Number of reporting countries providing social insurance coverage for mental disorders

Social insurance coverage	Number of reporting countries
Number of reporting countries	14
No social insurance scheme	5 Djibouti, Iraq, Oman, Somalia, Sudan
No mental disorders are covered by social insurance schemes	2 Afghanistan, Pakistan
Only some severe mental disorders are covered by social insurance schemes	2 Morocco, Syrian Arab Republic
All severe and some mild mental disorders are covered	1 Tunisia
All mental disorders are covered	1 Islamic Republic of Iran
All mental disorders and all mental health problems of clinical concern are covered	3 Egypt, Jordan, occupied Palestinian territory

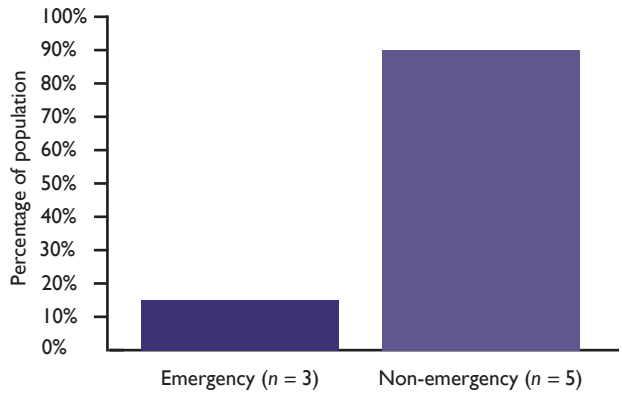

Figure 3.13 Percentage of the population with free access to essential psychotropic medicines

Results revealed clear differences in access to psychotropic medicines between countries in emergency situations and those not in such situations. Specifically, 15% (n = 3) of the population in emergency countries has free access to medicines compared to 90% (n = 6) for non-emergency countries.

Affordability of medicines was also assessed. The five countries whose entire population has access to free psychotropic medicines were not asked to provide information on these items (*3*). Affordability of medication was measured by asking for the proportion of the daily minimum wage needed to pay for one day of the cheapest available medication, without any reimbursement. The cost of medicine for the countries was 4% of the minimum daily wage for antipsychotics and 6% for antidepressants (Figure 3.14).

The cost of psychotropic medicines varies substantially between countries, with Morocco having the lowest cost and Sudan, by far, the highest. Cost of medicines is more than twice as high in countries in emergency situations (n = 3) as in countries in non-emergency situations (n = 7) (Figure 3.15).

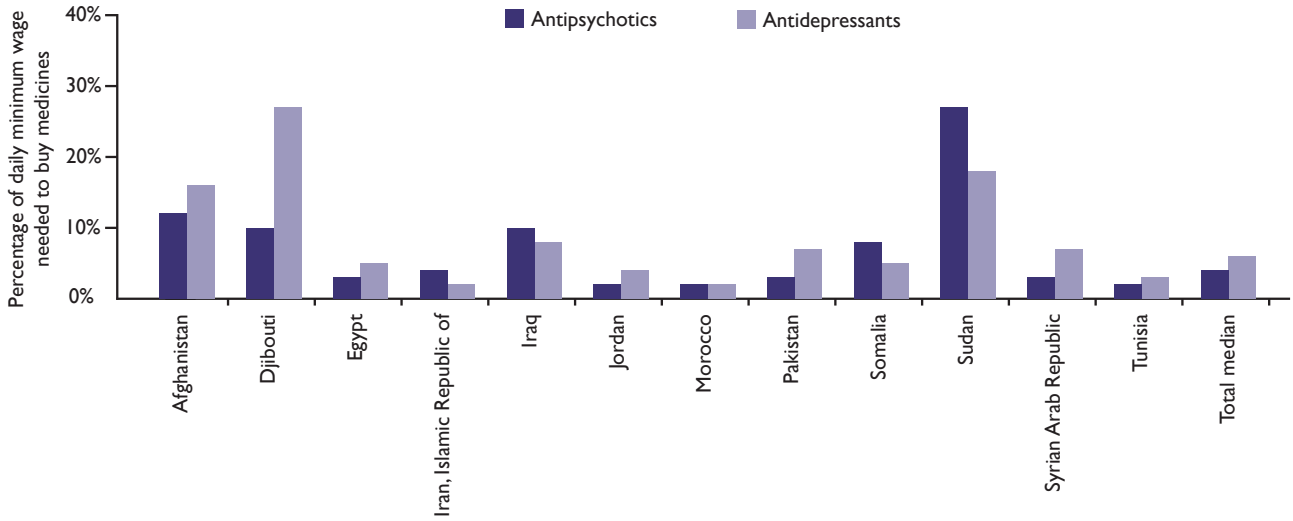

Figure 3.14 Percentage of the daily minimum wage needed to purchase antipsychotic and antidepressant medicines for each country (n = 12)

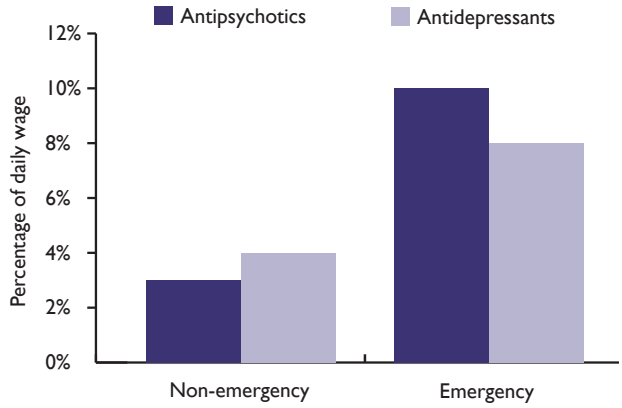

Figure 3.15 Percentage of the daily minimum wage needed to purchase antipsychotic and antidepressant medication, by emergency status (n = 10)

3.4 Links with other sectors

Collaborative links with other relevant health and non-health sectors are important for preventing and treating mental disorders. Countries were asked to report on whether or not they have a formal collaborative programme with various health and non-health agencies and departments. A formal link is defined as involving: a written agreement of collaboration and/or a joint activity or publication (Table 3.2). In the Region, the mental health system's links with social welfare and employment agencies and with the housing sector are the weakest.

Links with the education sector

Links between the department of mental health and the department of education are found in 64% of the countries (n = 9).

The extent of collaboration between the mental health and education sectors was also assessed through an item measuring the proportion of schools that have a part-time or full-time mental health professional on staff. The presence of such staff in schools is 7% (median proportion).

The extent to which promotion and prevention activities are provided in schools was measured by asking about organized activities aimed at promoting mental health and/or preventing the occurrence and progression of mental disorders. Examples of such activities include developing

Table 3.2 Countries with formal collaborative programmes between mental health and other health and non-health agencies

Programme	*n*	Number of countries
HIV	14	7 (50%)
Reproductive health	14	8 (57%)
Child health	14	7 (50%)
Substance abuse	14	10 (71%)
Child protection	14	7 (50%)
Elder care	13	7 (53%)

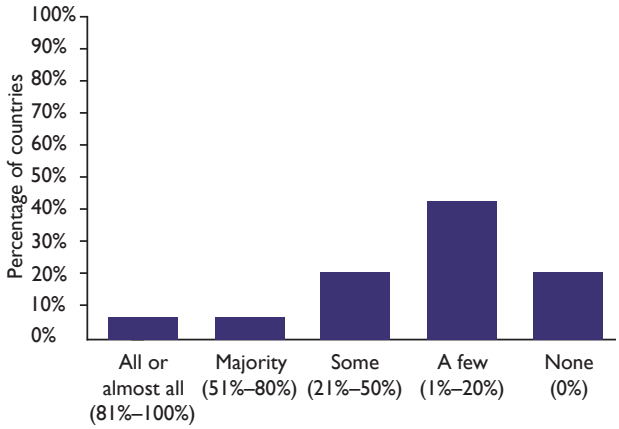

Figure 3.16 Countries offering promotion and prevention activities in schools (n = 14)

social skills, emotional communication, stress management, and coping skills. Three countries do not have any such activities. In most countries (9 of 14) between 1% and 50% of schools have such activities. Only two countries have promotion or prevention activities in the majority of their schools (i.e. between 51% and 100%) (Figure 3.16).

Links with the social welfare and employment sectors

Formal links between mental health departments and employment departments are just as weak as in the global sample (*8*): they exist in only 29% of the countries.

Countries were asked about existing legislation that protects patients from discrimination (e.g. dismissal or lower wages) solely because they have a mental disorder. Of the participating countries, 79% do not have any legal provisions.

Most (86%) countries do not have any legislative provisions for employment (i.e. a legal obligation for employers to hire a certain percentage of disabled people). Equity in the distribution of welfare benefits was assessed by calculating the number of people receiving welfare benefits because of a disability due to a mental disorder as a proportion of the number of people receiving benefits due to any disability. Five countries reported that social welfare benefits are not available in their country. Four countries were not able to provide data on this item. In the countries that were able to provide data (n = 5), social welfare benefits due to mental disorders are provided to 27% of the population (median proportion).

Links with the housing sector

Links with the housing sector exist in two countries and only one of these two has legislative or financial provisions for housing. Legislative or financial provisions against discrimination in housing do not exist in any country.

Links with the criminal justice system

Over half (57%) of the participating countries reported that their mental health departments have formal links with their criminal justice systems.

Countries were asked about educational activities on mental health conducted within the criminal justice system. Just over half of the countries (8 of 14) have conducted such activities for a few (1%–20%) police officers and five countries have conducted such activities for a few lawyers and judges within the past five years (Figure 3.17).

Three countries reported that all prison facilities have at least one prisoner in contact with a mental health professional per month. It should be noted that having one prisoner in contact with a mental health professional on a monthly basis is not enough to conclude that there is a strong link between prisons and the mental health system.

In two countries, no prisoners are in contact with a mental health professional. Not having a single prisoner in contact with a mental health professional per month can be considered an indicator of the absence of a link with the mental health services.

Half of the reporting countries (50%) estimated that less than 5% of prisoners have psychosis. The other 50% were not able to provide this information. Six countries (43%) reported that less than 5% of prisoners have mental retardation.

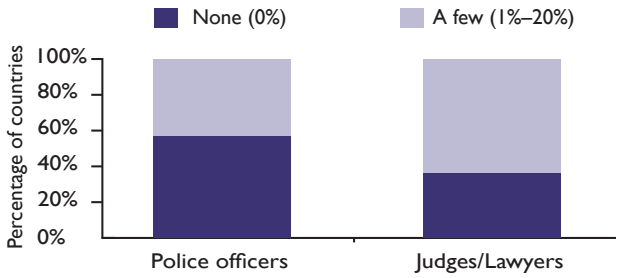

Figure 3.17 Percentage of countries offering educational activities on mental health to criminal justice personnel for the total sample (*n* = 14)

3.5 Human rights

Countries responded to a number of items regarding protection of the human rights of users. Protection of human rights means having the following provisions in place: providing the least restrictive care , obtaining informed consent before treatment, respecting confidentiality, avoiding physical restraint and seclusion whenever possible, establishing voluntary and involuntary admission procedures, providing complaints and appeals processes, protection from abuse by staff, and protection of user property.

Countries were asked whether or not they have a human rights review body. In this study, a human rights review body refers to a national or regional level body that assesses the protection of users' human rights in mental health facilities. Of the participating countries, 79% reported having such a review body, which is similar to the global rate (*8*) (Figure 3.18). Islamic Republic of Iran, Iraq and Somalia are the only countries that do not have a review body.

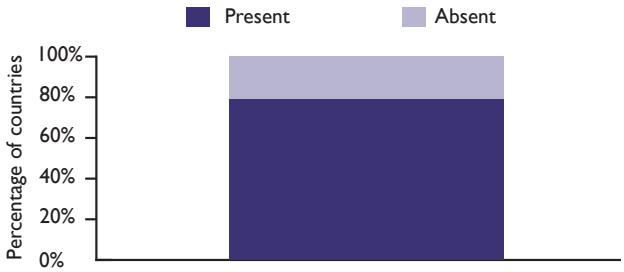

Figure 3.18 Presence of a human rights review body (*n* = 14)

The functions of the human rights review body were assessed for the 11 countries that reported having one (Figure 3.19).

For three functions (overseeing inspections, reviewing involuntary admission procedures and reviewing complaints), there appear to be differences between the countries based on conflict status. Countries in non-emergency situations tend to: give more authority to their human rights review bodies; allow the review bodies to review complaints and oversee involuntary admissions procedures and inspections; and allow the review bodies to impose sanctions on facilities that consistently violate human rights (Figure 3.19).

Countries also reported on whether or not an annual human rights inspection by an external body occurs in mental health facilities (i.e. mental hospitals, community-based inpatient units, and community residential facilities). The median rate for the participating countries is 3.9% (*n* = 10), indicating that there are limited human rights inspections in the majority of the countries, which is consistent with the global situation (*8*).

Training on human rights issues for mental health staff was also assessed. Overall, human rights training is as minimal as inspections. Training refers to the provision of at least one day of training, a meeting, or other type of working session on protecting patients' human rights in the previous two years. The median rate of training for the 10 countries that provided this information was 3%.

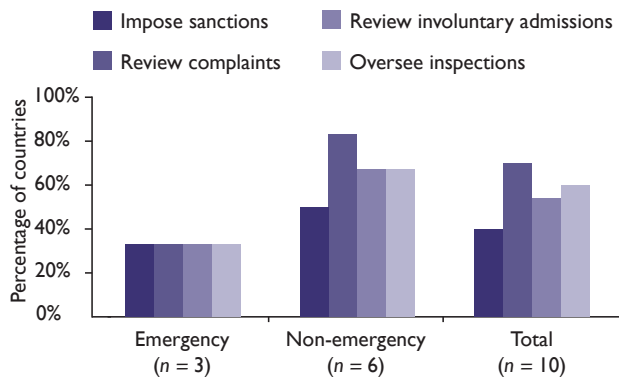

Figure 3.19 Countries that authorize their human rights review bodies to perform various functions

4. Discussion

This section discusses the findings of the WHO-AIMS study in 14 countries of the Eastern Mediterranean Region relating to the six building blocks and five desirable attributes of mental health systems. It also discusses the extent to which regional findings differ from global trends, makes comparisons based on income group, and compares low-middle income countries in complex emergency and non-emergency situations. As a whole, these comments are intended to provide a context for the findings in this study in order to enhance understanding of mental health systems in the Region.

4.1 Governance

In terms of mental health governance, the Region mirrors the global situation (*8*). Results indicate that a framework for mental health action exists in most of the participating countries, as the vast majority (86%) have either a mental health policy or plan. That being said, the presence of a policy or plan does not necessarily ensure good governance for mental health. Moreover, the present study does not measure how well conceived the policies or plans are, nor whether or not they have been implemented. Thus, even though a country may have a policy or plan, their benefits may fail to reach the population due to poor implementation.

In contrast to the high rates found for the presence of a policy or plan, fewer countries (57%) have mental health legislation. This rate is lower than the global rate of 78% reported in the *Mental health atlas* (*19*). Mental health legislation is necessary to help protect the rights of people with mental disorders (*20*). Just under half of the countries in the Region do not have such legislation, which places people with mental disorders at risk of abuse. However, the existence of mental health legislation alone does not necessarily guarantee the protection of human rights, especially if the legislation is outdated and contains provisions that could lead to human rights violations.

4.2 Financing

The median level of mental health spending per capita in the reporting countries is US$ 0.15. The Region's per capita expenditure is half that of the global sample (*8*). The estimated level of spending needed to cover common mental disorders is considered to be US$ 3–4 per capita (*16*). Lastly, countries in the Region allocate a mere 2% of the government health budget to mental health.

Half of the mental health funds in the Region go to mental hospitals, which is substantially lower than the global proportion of 80% (*8*). It should be noted that when half of the funds available for mental health are devoted to mental hospitals, all areas of community care are left with relatively few resources, which adversely affects the development of the mental health system, especially at the community level. Without adequate financing, good mental health policies and plans will not be implemented effectively (*21*).

4.3 Information systems

Consistent with global trends, about three out of four countries (71%) have a mental health information monitoring system. This finding is also consistent with that reported in the *Mental health atlas*, which reported a global rate of 76% (*19*). The majority of countries have a mental health monitoring system and the majority (65%) also publishes the data. The primary purpose of a mental health information collection system is to enable decision-making that will lead to service improvement (*22*). If the data collected is not disseminated the information cannot be used to improve service development. In terms of the collection of mental health information by various mental health facilities, high rates of collection were generally found in all types of facilities (i.e. outpatient facilities, community-based inpatient units, and mental hospitals) on basic indicators such as number of users, beds, and diagnoses. However, systematic collection of information on the number of involuntary admissions and the use of physical restraint and seclusion was poor.

The systematic collection of information on these activities is necessary to protect human rights.

4.4 Service delivery

Even though the integration of mental health into primary health care has been a core recommendation of WHO for more than 30 years, the majority of countries have not met this goal. The majority (71%; 10 of 14) of the participating countries reported having a formal link between their mental health departments and primary health care departments within the Ministry of Health. Nonetheless, other available data indicates that this collaboration needs to be strengthened. For instance, of the participating countries, 21% (3 of 14) reported not having assessment and treatment protocols available in any primary health care settings and only 21% of the countries (three of 14) reported that all, or almost all, primary health care doctors make at least one referral per month to a higher level of care.

The availability of psychotropic medicines is also limited in primary care. Only one in three countries (36%) reported that these medicines are available in all, or almost all, primary health care clinics. The Region's poor integration of mental health care into primary health care is consistent with the global situation described in the 2008 WHO-WONCA report on integrating mental health into primary health care (*23*) and in the 2009 WHO-AIMS global study (*8*).
Regarding the organization of mental health services, 13 of the 14 countries have a mental health authority. However, only half of participating countries reported organizing their mental health services in catchment areas. It is possible that countries are defining catchment areas differently and it is also possible that not all catchment areas function equally well.

With respect to service provision, mental health services in the Region are generally consistent with global trends (*8*). Significant differences among the countries were found in the following isolated indicators: a) the rate of users, ratio of facility per adult and child population and follow-up community care in outpatient facilities; b) the rate of attendance, rate of users and facility to population ratio in day treatment facilities; c) involuntary and female admissions in community-based psychiatric inpatient units; f) rate of beds, average length of stay and child and adolescent users in community residential facilities; and g) the rate of beds for youth in other residential facilities.

Outpatient facilities

The number of users treated in outpatient facilities in the Region is only two thirds of the number treated in the global sample (299 versus 503) (*8*). In addition, one facility serves twice as many adults and children in the Region as the global sample (*8*), which indicates difficulties meeting the health care demands of users. Lastly, follow-up community care is provided up to 18 times more in the global sample than in the regional sample (*8*). In outpatient services, the lack of follow-up care is an important issue because without follow-up care it is difficult to transfer mental health care for patients with severe mental illnesses from mental hospitals to community settings.

The availability and accessibility of outpatient care varies considerably according to country income level. The gap between low-income countries and lower middle-income countries is twofold in terms of availability of facilities and fivefold in terms of the percentage of children treated.

Day treatment facilities

With the exception of one country, which has 31 day treatment facilities, such facilities are scarce, at best, and nonexistent, at worst, in the Region. These facilities are not present in two thirds of the countries, whereas they are not present in about a quarter of the global sample (*8*). Furthermore, even when they are present, there are very few of them (from one to two facilities per country).

Day treatment facilities play an important role in urban areas, but they are uncommon in rural settings. In a 2007 WHO paper, it was posited that day treatment facilities are often ineffective

in rural areas, where families are reluctant to send sick family members to them (*24*). According to this argument, families believe that the tangible gains their disabled or ill family members accrue working in a sheltered workshop (which is essentially an urban model) are minimal and that it is easier to look after them at home. Unlike in crowded urban environments, there is usually a greater tolerance of the behaviours of chronically mentally ill people in rural areas.

In terms of regional and global differences regarding day treatment facilities, twice as many users are treated in day treatment facilities in the global sample as in the regional sample (*8*). In addition, one facility serves five times as many people in the Region than it does in the global sample (*8*).

A marker of the development of community care is access to acute care in general hospitals (community-based psychiatric inpatient units). With the exception of two countries, all countries have these units. The length of stay in general hospitals is short (about three weeks).

There are only two regional and global differences with respect to community-based psychiatric inpatient units. First, one in 10 admissions is involuntary in the Region, while one in four admissions is involuntary in the global sample (*8*). Second, there are fewer female admissions in the Region than in the global sample (*8*).

There is a wide gap between emergency and non-emergency countries on two community-based inpatient unit indicators. In non-emergency countries, there are more beds and a greater number of people are served by one facility.

There is also one notable difference by income category: the proportion of female users is 24% for low-income countries, compared to 38% for lower middle-income countries, and 48% for the high-income country.

Mental hospitals

With the exception of Djibouti, mental hospitals exist in all countries' networks of mental health facilities. The fact that Djibouti does not have any mental hospitals could provide public officials there with an opportunity to develop decentralized care in psychiatric institutions and work towards community care (*25*). In the other countries, the number of beds in mental hospitals has increased by 7%, while it has not changed over the past five years in the global sample (*8*).

In terms of diagnoses, close to half of all patients in mental hospitals are diagnosed with schizophrenia and about one fifth with mood disorders. These rates are similar to global diagnostic trends (*8*). The relatively higher rate of diagnosis of chronic disorders in mental hospitals is likely a reflection of the fact that a significant proportion of their beds are used for patients with chronic disorders.

In terms of differences based on countries' income, the rate of mental hospital users increased three times with each income category. There are also several differences in the provision of services through mental hospitals in emergency and non-emergency countries. In reporting countries, within the past five years, twice as many beds were added to mental hospitals and one facility serves five times as many people in emergency countries as compared to non-emergency countries (16 versus 3 million people). Despite the higher bed increase and facility per population ratio in mental hospitals located in emergency countries, non-emergency countries treated a greater number of users in mental hospitals. There are also fewer mental hospitals per 100 000 population in emergency countries (3.22) than in non-emergency countries (7.74).

Community-based psychiatric inpatient units

The use of mental hospitals is radically different from the use of community-based inpatient care. The length of stay is relatively longer (58 days) in mental hospitals than in community-based psychiatric inpatient units (23 days). Mental hospitals may function more often as acute mental health wards in the global sample (where there is a 2 to 3 week stay), whereas in the Region they may function more often as residential units

for long-stay patients. This has possible positive implications for plans to downsize mental hospitals because, in general, developing community-based inpatient units and community residential facilities can supplant long-term care in mental hospitals.

In comparing diagnostic patterns between community-based psychiatric inpatient units and mental hospitals, the figures relating to mood disorders and personality disorders are very similar. However, in community-based inpatient units there is a lower percentage of patients with schizophrenia and substance abuse disorders and a higher percentage of those with neurotic disorders and "other disorders".

Community residential facilities

The availability of community residential facilities is limited in the Region as well as in the global sample (*8*). The countries that have such facilities present a more positive picture, at least on a few indicators, than the countries in the global sample (*8*). First, the rate of beds in residential facilities is twice as high in the Region as in the global sample (2 versus 0 beds per 100 000 population). Second, the average length of stay per patient in the Region is two thirds the length of stay in the global sample (183 compared to 333 days). Third, more children and adolescents are treated in community residential facilities in the Region than in the global sample (37% versus 0%). Nevertheless, in order to better understand the importance of these facilities at the system level, it is important to know what function they serve within a country's mental health system. For example, if these facilities are not well integrated into the community mental health service network, they may function as small mental hospitals, especially if the length of stay is relatively long. Furthermore, the relative paucity of such facilities raises questions about the development of community care.

Forensic care facilities

Most forensic beds are located in mental hospitals or in specialized forensic units within mental hospitals. Except for one country, it is very rare to find these beds in prisons. One fifth of the patients stay in these units for less than 1 year and one fifth stay less than 4 years. In one third of the reporting countries (n = 5) there are no forensic beds available. Where forensic beds are unavailable, it is possible that patients with mental disorders are placed in prisons without access to appropriate care and with the prospect of potential abuse by other prisoners. However, the fact that most of the forensic beds available are located in mental hospitals is also a cause for concern. Often people who have committed a crime end up staying longer in forensic beds in mental hospitals than they would have if they had served their prison term.

Other residential facilities

The availability of beds in "other" residential facilities (i.e. residential facilities outside the mental health system) is scarce in the Region. There is only 1 bed per 100 000 population as opposed to the global rate, which is close to 5 beds per 100 000 population (*8*).

4.5 Psychotropic drugs

For most of the participating countries, at least one psychotropic drug is included in the essential medicines list. However, the availability of psychotropic medicines within the primary health care system is limited and, even when medicines are available in primary health care clinics, only 7% of the countries (n = 1) allow nurses to prescribe medication.

On a more positive note, results suggest that psychotropic medicines are widely available in mental health facilities (i.e. mental hospitals, outpatient facilities and community-based inpatient units) in most countries. It should be noted that, although the medicines are available, they are not necessarily accessible to all patients because they may not be affordable. For example, in low-income countries, the vast majority of the population (85%) does not have access to free or inexpensive psychotropic medicines. Moreover, the results reveal clear differences in access to psychotropic medicines according to a country's

emergency status. Specifically, only 15% ($n = 3$) of the population in emergency countries has access to free medication compared to 90% ($n = 6$) of the population in non-emergency countries.

For those who have to pay out of their own pockets, the costs can be high, especially for countries facing emergency situations. In three of these countries people spend 10% of their daily minimum wage on antipsychotics and 8% on antidepressants. In addition, people often have to pay for clinical consultations and transportation to facilities. Health care costs that exceed more than 10% of income are considered "catastrophic" and can force people into greater poverty (*26,27*).

4.6 Mental health workforce

The results of this study show that the majority of the countries lack adequate numbers of mental health professionals (3 per 100 000 population), most notably in low-income countries, which have 1 professional per 100 000 population. The total number of professionals working in mental health facilities is lower in the Region than in the global sample (*8*). Human resources are the most valuable resource in the mental health system, so the insufficient number of mental health professionals is a major obstacle to providing care for people with mental disorders (*28*). Although primary health care staff can and should also provide these people with care, an adequate number of specialized mental health professionals remain essential. More psychiatrists work in the private sector than in the public, which is a reason for the inadequate numbers of specialized mental health professionals in primary health care. In the Region, 50% of psychiatrists work in the private sector, whereas in the global sample only 15% do (*8*).

Not only is there a shortage of specialized mental health professionals in primary health care, but also in the next level of mental health facilities. More nurses than any other type of professional work in mental hospitals and in inpatient and outpatient facilities.

There is an imbalance in the type of mental health professional working in each level of care, as well as in the distribution of mental health professionals in institutionalized care versus community care. For example, nearly half (48%) of the mental health professionals in the Region work in mental hospitals and they are concentrated in urban areas. In addition, the number of professionals in the Region working in mental hospitals is only half the number of those working in the global sample (3 versus 6 professionals per 100 000 population) (*8*). These uneven geographic and institutional distributions may limit access to mental health care for people living in rural areas, especially for those in emergency situations where the health care infrastructure may be in need of repair. Twice as many human resources in non-emergency countries (67%; $n = 6$) are concentrated in mental hospitals as in countries facing emergency situations (36%; $n = 3$).

Similar to global trends, time devoted to mental health in professional undergraduate training programmes is very limited (3%–5% of total training hours). Moreover, as shown in the *Mental health atlas 2005*, existing training programmes for doctors and nurses are not adequately focused on community-based mental health care (*19*). This inadequacy makes it difficult to scale up mental health services within the public health care system (*5*).

There is also an insufficient number of mental health graduates, although more professionals graduated in countries with more economic resources. In addition, only a very small proportion of professionals received refresher training in the year prior to data collection. The median ranged from 1% (training on child and adolescents issues) to 4% (training on psychosocial interventions) to 10% (training on psychotropic drugs). Regular refresher training is key to ensuring appropriate care for people with mental disorders. A lack of sufficient refresher training may indicate that substandard care is being provided because mental health professionals are not benefiting from the latest advances and developments in the field.

4.7 User/consumer and family organizations

The majority of countries (72%) have no user associations and two thirds (65%) have no family associations. Family and user associations are important advocates and allies in fighting for the care and rights of people with mental disorders. Unfortunately, this network is underdeveloped both in the Region and the global sample (*8*).

4.8 Efficiency

An examination of the distribution of mental health resources between community and institutional settings reveals that half or more of the resources are concentrated in mental hospitals: 50% of financial resources, 64% of beds, and 48% of mental health professionals are devoted to mental hospitals. Mental health care is also more frequently provided in inpatient settings (e.g. hospitals and residential facilities) than outpatient settings (e.g. day treatment facilities and outpatient facilities). Across participating countries, there is one outpatient contact (1.3) for every day spent in inpatient facilities. Thus, despite WHO's calls for the downsizing of mental hospitals and the provision of community care (*4*), limited progress has been made. Given that mental health care provided in the community is more cost effective than institutional care, the current pattern of resource distribution in most countries impedes their ability to increase treatment coverage.

4.9 Coverage

The treated prevalence rate in mental health services reported in this study is most likely higher than the actual rate, because patients may be treated in more than one facility (e.g. in a day treatment facility and a community-based inpatient unit), resulting in double counting. Nonetheless, the figures indicate that half as many people in the Region are treated for mental disorders as in the global sample (*8*). In addition, children appear to be particularly underrepresented within the mental health system. The median rate of children treated per 100 000 child population is 79, which is half the rate found for the global sample (159) (*8*). These numbers are low, given that the prevalence estimate for severe mental disorders in children is approximately one in five (*29*).

Regarding severe mental disorders, the overall coverage rates for schizophrenia in the Region are 50% lower than those in the global sample (*8*). Only 15% of people with schizophrenia receive treatment, compared to 30% in the global sample (*8*). The majority of patients with schizophrenic disorders are treated in the community through outpatient services.

The level of coverage for mood disorders is extremely low: only 2% of people with such disorders receive treatment. The low rates of coverage may be partly explained by the fact that many patients with mood disorders are treated in the public health care system and that people with milder forms of depression do not always require or seek health care. Nevertheless, it is a matter of concern that, according to the data, only one in 50 people with mood disorders receives treatment in mental health facilities. According to the *Global Burden of Disease in 2002* (*1*) , it is estimated that one in four people with depression have severe depression. This means that a significant percentage of people with severe mood disorders do not have any access to specialized care. This suggests that the burden of depression is insufficiently addressed by mental health systems in the Region, as is the case in most countries globally (*8*). Concerning patterns of care, about nine in 10 people with mood disorders receive treatment in outpatient facilities, which confirms the importance of community care.

This study reveals a large treatment gap in the Region. Indeed, the gap appears to be even wider than that reported in previous analyses (*3*). However, it should be noted that the treatment prevalence rates reported in this assessment are limited to mental health services and do not cover primary health care. Nevertheless, the wide gap should cause serious concern among service planners. For schizophrenic disorders, the data

suggest that fewer than two in 10 patients (15%) receive treatment in mental health services, while an earlier study estimated that two thirds of patients receive treatment in those services (*3*). The data on mood disorders are particularly disconcerting: only 2% of patients with mood disorders (including bipolar disorders and severe depression) are cared for within mental health facilities.

Comparisons based on emergency status reveal that, in general, countries in emergency situations treat twice as many people for mood disorders (97 per 100 000 population; $n = 4$) than countries in non-emergency situations (47 per 100 000; $n = 6$). Regarding facilities, countries in emergency situations treat 90 people with mood disorders per 100 000 population ($n = 4$) in outpatient facilities, whereas countries in non-emergency situations treat 39 people per 100 000 population ($n = 6$).

The Region has slightly fewer links with social welfare and employment agencies than the global sample, but provides social welfare benefits to a higher proportion of its population (*8*).

4.10 Access/equity

Inequity in access to care for certain groups (e.g. children and rural users) is a problem in the Region. This is evident in the unequal distribution of beds and community facilities in each country's largest city and the rest of the country. In most countries the density of resources (i.e. beds and professionals) is two to three times greater in the largest city than in the rest of the country.

The data also suggest that, on some access/equity indicators, there is more inequity in low-income countries. For example, the unequal distribution of beds between urban and rural areas is greater in countries with fewer resources and the concentration of nurses in cities in low-income countries is five times greater. The same trend applies to countries in different emergency situations. Countries facing emergency situations have a bed density in urban areas that is five times that of rural areas (ratio 4.52), while non-emergency countries have an urban bed density that is double that of rural areas (ratio 2.04). Thus, at least on a few specific indicators, there appears to be even more inequity in countries with fewer economic resources and in countries facing emergency situations.

4.11 Link with other sectors

Results suggest that links between mental health and other relevant health and non-health sectors are weak. Ten reporting countries (71%) indicated the existence of formal links between mental health and substance abuse care, as well as with and primary care . However, very few countries (14%) reported the existence of formal links between the mental health and housing sectors and only 29% reported links between the mental health and employment sectors. Rehabilitation of patients and their integration into the community will only be accomplished when countries make concerted efforts to establish meaningful collaboration between the mental health, employment and housing sectors.

4.12 Human rights

Human rights activities are very limited in the Region. The majority of the countries participating in the study reported conducting inspections in only 4% of all their mental hospitals, community-based inpatient units and community residential facilities. Based on the available data, involuntary admissions to mental hospitals are widespread: 40% of admissions to mental hospitals are involuntary. Involuntary admissions are considerably lower in community-based inpatient units (8%).

Of the reporting countries, four of seven indicated restraining or secluding over 20% their patients in inpatient units. Two of nine countries indicated restraining or secluding over 20% their patients in mental hospitals, while six of nine countries indicated that their mental hospitals restrained or secluded less than 10% of their patients . Seven countries could not provide this information for their inpatient units and four could not provide it for their mental hospitals. The lack of information on these indicators could imply a lack

of attention to human rights and could hamper the implementation of reforms in this area.

Data on physical restraint and seclusion in the Region indicate a more frequent use of coercion in community-based inpatient units than in mental hospitals, but fewer involuntary admissions to the former than the latter. The frequent use of physical restraint and seclusion and the high percentage of involuntary admissions indicate a potential problem in terms of respecting and protecting the human rights of users in these facilities.

5. Conclusions

5.1 Outcome of the study

Two primary conclusions can be drawn from the results presented in this report.

- In almost all aspects, the mental health systems of the Region reflect the status of mental health systems in the global sample.
- Although a few aspects of the Region's mental health systems differ according to countries' income and emergency status, for the most part, they have more similarities than differences on WHO-AIMS indicators. These similarities are summarized under four headings as follows.

1. Mental health resources are scarce, inequitably distributed and inefficiently used

The findings of this report are consistent with information available from other sources (*30*), which indicate that in low and lower middle-income countries mental health resources and activities are scarce, inequitably distributed, and inefficiently used.

Scarcity of resources deeply affects the Region. Compared to other global samples already demonstrating scarcity of resources, mental health spending per capita is only half the amount reported in the global sample (*8*). In addition, the population served by day treatment and outpatient facilities is two to five times higher than in the global sample; the number of mental health professionals working in all mental health facilities is two times lower (3 versus 6 per 100 000 population) than in the global sample; and three times more psychiatrists work in the private sector than in the global sample (*8*). Furthermore, out of the 14 countries in this study, two countries do not have inpatient units, nine do not have day treatment facilities, and ten do not have community residential facilities. Without a minimum level of resources (i.e. mental health facilities and staff), it is difficult for a country to provide community care.

The Region's scarcity of resources is evident in countries dealing with emergency situations where, compared to non-emergency countries, there are more beds (1 versus 2 beds per 100 000 population) in inpatient units and five times as many nurses in urban areas than in rural areas. However, scarcity of resources is also apparent in non-emergency situations where twice as many nurses work in the urban areas than in the rural areas.

Furthermore, resources are inequitably distributed, resulting in greatly restricted access to mental health care for certain groups, such as children, poor people, rural people, and people living in emergency situations. For example, controlling for population density, the number of psychiatric beds is three times higher in the largest city than in the rest of the country. Overall, resources for mental health are not distributed efficiently in the Region: half of the financial resources and half of all available mental health staff are concentrated in mental hospitals, yet these hospitals serve only one in 10 patients.

Although there are initial signs that the level of scarcity, inequity, and inefficiency vary in relation to income and emergency status, additional analyses with larger sample sizes for each subgroup (e.g. low-income countries and high-income countries) are needed to better understand any potential income and country status disparities.

2. Community-based mental health services are underdeveloped

Most countries have the basic building blocks necessary to develop a well functioning mental health system (e.g. mental health services and human resources). There is at least one of each type of facility in every country. However, the development of community-based mental health services has been slow: the number of mental hospital beds has increased by 7% in the last five years; six of 10 beds are located in mental hospitals; and there are 49 inpatient beds for each outpatient facility (outpatient and day treatment). Inpatient mental health facilities, whether located in general hospitals or mental hospitals, are not

as effective at providing access to services to the general population. Outpatient care is a more effective means of increasing the mental health system's access and coverage.

Only community care has the potential to reduce the gap between the needs of the population and supply of services. However, at present, and consistent with global trends, two elements of the mental health network – day treatment and community residential facilities – are particularly scarce in the Region. As policy-makers in the Region consider shifting service provision from mental hospitals into the community, the need for creating community residential beds will become a priority. Chronically ill patients discharged from mental hospitals will need to be able to live somewhere in dignity (e.g. in residential units in the community).

Overall, there appears to be a scarcity of general hospital beds. Therefore, encouraging the creation of these beds in more areas should be a top priority. They are needed not only to supply inpatient treatment for acute cases, but also to facilitate the process of deinstitutionalization. As mental hospital care shifts towards community-based care, general hospitals can play an important role in caring for discharged patients. In addition, acute inpatient units can form the backbone for supporting mental health in primary health care at the district level (*25*). Mental hospitals often function as acute wards and it is not possible to decentralize their resources without increasing the capacity of general hospital units. The absence of mental hospitals in one country (Djibouti) presents a real possibility for the development of community care there. Since large amounts of Djibouti's resources are not being allocated to mental hospitals, funding can be directed to community facilities and staff.

3. Mental health systems often are not well linked to other relevant sectors

It is crucial to connect the mental health sector to the rest of the health sector, to the welfare system and, more generally, to civil society. This is important not only for developing a more effective mental health system, but also for reducing stigma, which is more prevalent when mental health care is isolated. Collaboration between the mental health system and other health and non-health sectors is generally weak in the Region, particularly with regard to the housing sector and social welfare and employment agencies.

There are many possible reasons for the isolation of the mental health sector. These reasons include: the predominance of mental hospitals, which are often standalone institutions disconnected from other mental health services; a poorly functioning referral and back-referral system between mental health services and primary health care; and limited and/or poorly structured links with other sectors (e.g. social welfare and employment).

The integration of mental health care into the primary health care system was a core recommendation of *The world health report 2001* (*4*), but it has not been achieved in most countries in the Region. On one hand, the high rate of prescription privileges for doctors in primary care is a positive step toward the provision of community care for people with mental disorders. On the other hand, the low rates of initial training and refresher training for primary health care staff diminish the quality of diagnoses and psychopharmacological treatment. Weak links between primary health care and mental health services are one of the major obstacles to bridging the treatment gap for mental disorders (*23*).

4. Human rights are given insufficient attention

Findings show that not enough attention is being given to human rights. Mental health legislation exists in only half of the participating countries, some legislation is grossly outdated, inspections of inpatient facilities are infrequent, there is little training on human rights, and systematic collection of data on involuntary admissions, physical restraint, and seclusion is particularly poor. Urgent action is needed in this area.

5.2 Use of WHO-AIMS findings to strengthen mental health systems in the Region

WHO-AIMS's assessment of the essential building blocks of mental health systems can be used for scaling up mental health care in the Region. Scaling up comprises a deliberate effort to increase the impact of health service interventions (which have been successfully tested in pilot projects) so they benefit more people and foster sustainable policy and programme development. The information compiled here can help these 14 countries to fulfil the objectives of the WHO mental health Gap Action Programme (5).

Baseline information provided in this report can be an effective tool for advocacy and for developing plans to strengthen mental health systems in the Region. For example, findings show that 50% of the Region's mental health budget is directed to mental hospitals and that a shift towards community care is necessary to bridge the treatment gap. Thus this information can help prioritize the mental health agenda in the Region. Once plans have been developed and implemented, changes in the mental health system will need to be monitored over time. For this reason, the next step in developing effective mental health systems will involve establishing efficient and sustainable mental health information systems. In summary, this report highlights the urgent need in the Region for additional resources to be directed toward mental health care, for the limited resources available to be more equitably distributed, and for resources concentrated in mental hospitals to be diverted to community care.

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Mental health systems in the Eastern Mediterranean Region is the final report of an assessment of six key components of mental health systems in 14 countries, based on the WHO Assessment Instrument for Mental Health Systems (WHO-AIMS). It is aimed at policy-makers, health system managers, mental health professionals and others interested in mental health issues. The report will help countries to identify the main weaknesses in their mental health systems, and develop information-based mental health policies and plans with clear base-line information and targets. It provides a starting point for countries to monitor progress in implementation of policies and legislation and to chart progress in provision of community-based services.

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