WHO proMIND Profiles on Mental Health in Development

HASHEMITE KINGDOM OF JORDAN
WHO proMIND Profiles on Mental Health in Development: Hashemite Kingdom of Jordan


ISBN 978 92 4 150566 6 (NLM classification: WM 140)

© World Health Organization 2013

All rights reserved. Publications of the World Health Organization are available on the WHO web site (www.who.int) or can be purchased from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int).

Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press through the WHO web site (http://www.who.int/about/licensing/copyright_form/en/index.html).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

The named authors alone are responsible for the views expressed in this publication.

Suggested Citation:

This and other profiles on mental health in development can be sourced from: http://www.who.int/mental_health/policy/country/countrysummary/en/index.html

For feedback or suggestions for the improvement of this publication, please email Dr Michelle Funk (funkm@who.int)
"The provision of quality community mental health services that are equitable, cost-effective and accessible to all people... [and that] reflect the comprehensive bio-psychosocial approach through multidisciplinary interventions, with emphasis on human rights, participatory approach and cultural relevance."

Acknowledgements
This publication has been produced as part of the World Health Organization's (WHO) profiles on mental health in development (WHO proMIND), and has been written and edited by:

Dr Bassam Hijiawi, Director, Department of Primary Health Care, Ministry of Health, Amman, Jordan
Dr Hashim A. Elzein Elmousaad, (former) WHO Representative for Jordan, Amman
Dr Anita Marini, (former) Public Health Officer for Mental Health, Office of the WHO Representative for Jordan, Amman
Dr Michelle Funk, Coordinator, Mental Health Policy and Service Development, Department of Mental Health and Substance Abuse, WHO, Geneva
Ms Sarah Skeen, (former) Technical Officer, Mental Health Policy and Service Development, Department of Mental Health and Substance Abuse, WHO, Geneva
Dr Nada Al Ward, (former) Sub-Regional EHA Coordinator for the Displaced Iraqis Programme, Office of the WHO Representative for Jordan, Amman, Jordan
Dr Khalid Saeed, Regional Advisor, Mental Health and Substance Abuse, WHO Regional Office for the Eastern Mediterranean (EMRO), Cairo, Egypt
Ms Zein Ayoub, National Officer for Mental Health, Office of the WHO Representative for Jordan, Amman

The preparation of this profile would not have been possible without the support of:
Dr Akram Eltom, The WHO Representative for Jordan, Amman

WHO proMIND): Hashemite Kingdom of Jordan
Potential partners interested in finding out more about mental health in Jordan should also contact project partners based in-country (contact details on page 11).

WHO proMIND
Potential partners and donors interested in supporting or funding WHO proMIND projects should contact Dr Michelle Funk (funkm@who.int), Coordinator, MHP, Department of Mental Health and Substance Abuse, WHO, Geneva, Switzerland

More information about WHO MIND and WHO proMIND projects is available on the website: http://www.who.int/mental_health/policy/en/
THE PROJECT

"The provision of quality community mental health services that are equitable, cost-effective and accessible to all people … [and that] reflect the comprehensive bio-psychosocial approach through multidisciplinary interventions, with emphasis on human rights, participatory approach and cultural relevance."
KEY ACHIEVEMENTS FOR MENTAL HEALTH IN JORDAN

- Establishment of a national mental health authority with a governing and executive role (Mental Health Unit within the PHC Department at the Ministry of Health)
- Establishment of a permanent National Technical Committee of stakeholder representatives to advise and support the new mental health governance body (mental health unit)
- Development and launch of national mental health policy and plan
- Development of inpatient unit in the King Abdullah II University Hospital / Irbid
- Integration of the WHO mhGAP program in the national plan
- Establishment of the national mental health users’ association, Our Step
- The establishment of three community mental health centers, two in Amman and one in Irbid
- Establishment of model admission unit for mental health patients in Al Fuheiss Hospital (National Centre for Mental Health)

NEXT STEPS FOR JORDAN

- Put in place mental health legislation
- Continue with plans to integrate mental health into primary health care, using mhGAP-IG
- Allocate adequate financial resources for mental health services
- Develop adequate human resources in mental health
- Develop of quality child and adolescent mental health services
- Change community negative perceptions toward mental health issues
- Establish a national review body on human rights in mental health facilities
- Establish three other community mental health centers
- Improve the mental health information system
- Strengthen the participation of community and religious leaders in mental health care
- Develop, review and pilot the screening protocols and implement parent training programmes for the prevention and care of developmental disorders
- Support and build capacity for NGO work in rehabilitation of people with mental problems
- Strengthen the partnership with local NGOs working in mental health
- Promote and support the newly established "Our Step" mental health users’ association
Mental health services and activities are provided by a range of stakeholders in Jordan, none of which have sole policy-making or budget-holding responsibility. Mental health services are provided by four major health providers (government, military, private and non-governmental/international), each with its own separate financing and delivery system, which provide inpatient and outpatient services at various levels.

Jordan’s mental health system relies strongly on medical treatment, with few resources dedicated to recovery or bio psychosocial treatment modalities. This is reflected in the high number of psychiatric versus psychosocial and allied medical staff in Jordan’s mental health system as well as the fact that the majority of mental health services are delivered through tertiary level facilities, with virtually no primary, community-based or self-care.

Recent years have seen growing commitment to improving mental health in Jordan. In 2010, Jordan was also selected as one of six countries for the implementation of the WHO Mental Health Gap Action Program (mhGAP). In 2011, the newly developed mental health policy and plan were adopted. This new policy highlights the importance of “quality community mental health services that reflect the comprehensive bio-psychosocial approach through multidisciplinary interventions, with emphasis on human rights, participatory approach and cultural relevance.” It aims to create a policy-making and budget-holding mental health authority within the Ministry of Health, to increase the number of community mental health centres, to increase the number and capacity of mental health staff, to promote mental health care users’ human rights, to reduce stigma, and to increase mental health advocacy, among other actions.
HISTORY AND MILESTONES

EARLY 1960’s
The very first psychiatric ward in the Royal Medical Services (RMS) was established in the army hospital in Marka. With a capacity of 30 beds, the ward aimed to assess the mental health of new army recruits. Doctors were sent for specialized training in the United Kingdom, to obtain a higher postgraduate degree in psychiatry.

1967
The war with Israel, in which Jordan lost control of the West Bank, meant that patients in the East Bank no longer had access to the country’s only psychiatric hospital in Bethlehem (1).

1968
The Ministry of Health established a 60-bed mental hospital at al Fuheiss (East Bank), with a specialized clinic three days a week.

1976
In 1976 the RMS psychiatric unit was moved from Marka hospital to the King Hussein Medical Centre, and the total number of beds increased to forty. The unit functioned jointly with other specialties (2).

1987
The National Centre for Mental Health, Jordan's main psychiatric hospital, was opened in Balqa' to provide mental health services.

1988
A plan for mental health service development was drafted, including: (1) the establishment of psychiatric outpatient clinics throughout the country; (2) training for doctors, nurses and other mental health workers; and the extension of mental health care to prisons.

1994
A national mental health workshop was held, aiming to integrate mental health into public health and to promote mental health awareness. It also outlined service strategies, training strategies and management and promotion strategies.

1997
The RMS psychiatric unit was moved back to Marka hospital due to a shortage of beds at the King Hussein Medical Centre.

2007
A mental health and psychosocial support (MHPSS) coordination group was established, in response to the growing numbers of displaced Iraqis. It is co-chaired by a UN agency and an international NGO and comprises over 50 local and international NGOs and agencies. The role of the group is to coordinate assessments; strengthen referral systems; provide training and staff support; disseminate and train stakeholders on the IASC Guidelines; set quality and minimum standards; and monitor the efforts of local and international bodies working on MHPSS. WHO’s role in this group was to co-chair the group starting from 2008, to act as a technical advisor, to set...
minimum standards for quality monitoring, to chair the technical revision of Interagency Technical Advice, and to support local NGOs.

2008

- WHO carried out first extensive assessment on mental Health needs in Jordan, entitled Mental Health and Psychological Support for Displaced Iraqis in Jordan: A Brief Assessment of Needs and Services. This report was used as the basis for improving mental Health in Jordan.

- National Steering Committee for Mental Health was established. Its terms of reference were to develop a national mental health policy and plan; to develop mental health legislation; to coordinate the implementation of community based mental health services; to monitor the implementation of mental health reform; to promote the establishment of a mental health service user association; and to promote the establishment of an association of families of mentally ill persons. The Committee was financially and technically supported by the WHO Jordan Country Office, in collaboration with a network of community health services in Italy. It included members from various government ministries including the Ministry of Health, Ministry of Social Development, Ministry of Higher Education, members from the Royal Medical Services, government universities, NGOs, mental health professionals from the private sector, and professional bodies of health workers. Users and family members, despite not being included officially in the committee, attended all the workshops and meetings contributing to the development of the policy and plan.

- Jordan, in collaboration with the WHO, began the conversion of three mental health outpatient clinics into pilot community mental health care centers (3). Two of these are in Amman (a standalone facility and a facility within a comprehensive primary health center) and one is in Irbid (within a comprehensive primary health center). The facilities were established under the health assistance programme for Displaced Iraqis, and the locations of the clinics were selected based on areas with a high presence of this group. A multidisciplinary team (comprising two psychiatrists, a nurse trained in mental health, a psychologist, an occupational therapist and a social worker) was established to drive the shift in these centres from outpatient clinics with a biological approach to community based mental health centres using the bio psychosocial paradigm. The new community-based centres have the following functions: early identification, diagnosis, treatment (individual rehabilitation plans with the involvement of the family) and follow up of service users; continued education, support and supervision of primary health care workers; collaboration with inpatient mental health services; promotion and awareness-raising of mental health issues in the community; collaboration with NGOs and human rights networks; promotion of the users association; and acting as a training centre for other multidisciplinary mental health teams. The referral system for the 3 mental health clinics was much enhanced by training general practitioners and family health doctors in different health facilities in Amman and Irbid. The WHO was heavily involved in this process by supporting the: establishment of the centres; renovation of clinics; provision of clinical tools; development of the philosophy, protocols and case-management system in these centres; and training of multidisciplinary teams in mental health, the bio psychosocial approach, the case management and recovery model and human rights. WHO also provided weekly clinical supervision, helped to build the capacity of local clinical supervisors and organized a study visit for the multidisciplinary teams to community mental health centres in Turin, Italy.

2009

- Three people from Jordan completed the WHO/ILS International Diploma in Mental Health Law & Human Rights.

- A workshop on human rights and mental health was held in Jordan. Trainers included Dr. Soumitra Patare and Dr. Moodi Zaki (Institute). Trainees were service users, family members and mental health professionals.

- On 10th October, the celebration of the World Mental Health Day was attended by over 2000 people.

- The WHO Jordan Mental Health Officer attended the global IASC reference group meeting in Copenhagen to present the work in Jordan as a good example of implementing the IASC guidelines in the field.
Mental health stakeholders also took part in a range of activities to develop mental health resources. JNC, WHO Jordan and the MoH started working on the inpatient model unit. The HESPER tool, for use in emergency settings, was piloted in collaboration with WHO HQ and Kings College of London. A regional Workshop was held on the use of the IASC guidelines to provide mental health and psychosocial support in emergencies.

2010

In October 2010, the Higher Council for Science and Technology (in conjunction with WHO and Kuwait Fund as a technical advisor) launched a National Report on Mental Health Systems and Services in Jordan.

Jordan was selected as the first of the six countries for the pilot implementation of the WHO Mental Health Gap Action Program (mhGAP). A stakeholder workshop was held in July under the patronage of Her Royal Highness Princess Muna Al Hussein, with consultants from WHO headquarters and WHO Lebanon and a training workshop was held with Primary care directors and staff in November.

The “Our Step” Users’ association was established. "Our Step", a consumer association for individuals affected by mental health problems, was established in Jordan in October 2010 by a group of service users, mental health professionals, the WHO, and the Ministries of Health and Social Development. The association was registered at the Ministry of Social Development and the association began a collaboration with the Greater Amman Municipality to provide premises for the association based in Rusaifa. The association began the building of a 'community centre' which further promotes the integration of mental health service users . “Our Step” was launched on 10th October, in celebration of World Mental Health Day.

2011

Jordan launched its National Mental Health Policy and Plan in preparation for its implementation (4). Several awareness-raising materials were disseminated about the mental health policy and plan, including a documentary about mental illness and the mental health system in Jordan, and a television advertisement to raise awareness about stigma and human rights violations against mental health service users. This film is available at: http://www.youtube.com/watch?v=m7Xq96eGZCw.

The Mental Health Unit was established under the Primary Health Care Administration, which will be the central governance unit for mental health, with policy-making and budget-holding authority.

The mhGAP intervention guidelines for 11 disorders were revised and adapted to the Jordanian context and training materials for these guidelines were developed. mhGAP training was held in Amman. The Mental Health Unit was established under the Primary Health Care Administration, which will be the central governance unit for mental health, with policy-making and budget-holding authority.

A project to build capacity in the social work field in Jordan through the provision of support to the Jordanian Nursing Council from Boston College was launched. HRH Princess Muna Al Hussein and the technical mental health officer from JNC and WHO support the initiative, which includes site visits and training. In addition, WHO began to host interns from Boston College as part of the programme.

The Ministry of Health began to assume control of the MHPSS coordination group.

The community multidisciplinary mental health teams were incorporated into the Ministry of Health. This also involved the recruitment and training of new staff, which was supported by WHO.

WHO mhGAP workshops were held in in July and November. The November workshop involved health care workers such as family doctors, GPs, and nurses from the 15 PHC centers identified to start implementing mhGAP-IG. The focus of the workshop was to adapt the programme to make it applicable to the local context, training sessions and refresher training and supervision visits to the pilot PHC centers.
The WHO AIMS instrument was used to gather baseline information about the mental health system in Jordan.

The first psychiatric inpatient unit in a government university hospital was opened in mid-March 2011, in Irbid. A second psychiatric inpatient unit in the government university hospital in Amman is planned, and work is planned to commence on an inpatient unit in one MoH general hospital in the south of Jordan.

Ministry of Health employed mental health staff for the 3 established mental health clinics (e.g. occupational therapist, psychologists, nurses trained on mental health, and social workers).

The Greater Municipality of Amman made a building available for the Users’ Association “Our Step” in Rusaifa (Zarqa). The opening was done on 28th July, under the Patronage of HRH Princess Muna Al Hussein.

**2012**

Jordan made significant strides as a pilot site for implementing the WHO mhGAP initiative. This involved completing mhGAP trainings for health care workers from Irbid, Mafraq and Ramtha, including family doctors, GPs, and nurses. In addition, a refresher training was conducted for previously trained health care workers in Amman. Also, Jordan hosted an international meeting in collaboration with WHO HQ and EMRO for the development of an mhGAP-IG module on stress spectrum disorders.

Jordan (MoH and Our Step Association) participated in the WHO Regional Consultation for the Development of a Global Action Plan for Mental Health.

In May, Jordan launched the 4Ws Mapping Tool findings for the Mental Health and Psychosocial Support Sector.

As part of the ongoing project to build capacity in the social work field in Jordan through support from Boston College, an intensive training for social workers in Jordan was provided by Boston College in collaboration with WHO Jordan and JNC. Participants represented multiple service providers including Ministry of Health, Royal Medical Services, Correctional & Rehabilitation facilities, Tafilah Women's Health Center, Jordan University Hospital and the International Medical Corps Jordan.

WHO Jordan signed an official agreement with the Jordanian Ministry of Health (MoH) for the development of an inpatient mental health unit in Ma’an Governmental Hospital. This will be the first inpatient mental health unit to be established in a MoH general hospital.

On October 10th, Jordan celebrated World Mental Health Day in association with WHO Jordan, Our Step Association and IMC Jordan.

Jordan participated in a regional training on the QualityRights Toolkit launched by WHO HQ. Preliminary plans for the implementation of this human rights project in Jordan were initiated.
Figure 1. Timeline

1960s
RMS establishes first mental health ward in hospital in Marka

1960s
RMS establishes first mental health ward in hospital in Marka

1987
Opening of the National Centre for Mental Health

1988
Plan for Mental Health Service Development drafted

1994
Formulation of National Mental Health Plan

2007
Establishment of mental health and psychosocial support coordination group

2008
Establishment of mental health and psychosocial support coordination group

2008/9
Work begins on drafting a new mental health policy and plan

2010
Establishment of mental health users' association "Our Step"

2010
Establishment of mental health users' association "Our Step"

2011
Finalisation and launch of National Mental Health Policy and Plan

2011
Finalisation and launch of National Mental Health Policy and Plan

2011
Jordan selected for WHO mhGAP program and guidelines adapted to local context

2011
Jordan selected for WHO mhGAP program and guidelines adapted to local context

2011
Opening of first psychiatric inpatient unit at a university general hospital

2011
Opening of first psychiatric inpatient unit at a university general hospital

2012
mhGAP training in Irbid, Mafraq and Ramtha

2012
mhGAP training in Irbid, Mafraq and Ramtha

2012
Work begins on drafting a new mental health policy and plan

2012
Work begins on drafting a new mental health policy and plan

2012
Development of a psychiatric inpatient unit at a Ministry of Health general hospital

2012
Development of a psychiatric inpatient unit at a Ministry of Health general hospital

2012
Regional training on the Quality-Rights Tool Kit

2012
Regional training on the Quality-Rights Tool Kit
OFFICIAL DOCUMENTS

DEVELOPMENT AND POVERTY REDUCTION POLICIES, STRATEGIES AND PROGRAMMES


HEALTH AND MENTAL HEALTH POLICIES, PLANS AND PROGRAMMES


LEGISLATION


SITUATIONAL ANALYSES


MAIN PARTNERS

NATIONAL LEADING PARTNERS
Dr Bassam Hijawi, Director, Department of Primary Health Care, Ministry of Health, Amman, Jordan
Email: dcd@orange.jo

WHO COUNTRY OFFICE
Dr Akram Eltom, The WHO Representative for Jordan, Amman
Email: eltoma@who.int
Dr Nada Al Ward, (former) Sub-Regional EHA Coordinator for the Displaced Iraqis Programme, Office of the WHO Representative for Jordan, Amman
Email: alwardn@who.int
Ms Zein Ayoub, National Officer for Mental Health, Office of the WHO Representative for Jordan, Amman
Email: ayoubz@who.int

WHO REGIONAL OFFICE FOR THE EASTERN MEDITERRANEAN (EMRO)
Dr Khalid Saeed, Regional Advisor, Mental Health and Substance Abuse, WHO Regional Office for the Eastern Mediterranean, Cairo, Egypt
Tel: +20 2 276 5368, Email: saeedk@emro.who.int

WHO HEADQUARTERS
Dr. Shekhar Saxena, Director, Department of Mental Health and Substance Abuse (MSD)
Email: saxenas@who.int
Dr Michelle Funk, Coordinator, Mental Health Policy and Service Development, MSD
Email: funkm@who.int
Ms Natalie Drew, Technical Officer, Mental Health Policy and Service Development, MSD
Email: drewn@who.int
Dr Kanna Sugiura, Technical Officer, Mental Health Policy and Service Development, MSD
Email: sugiuraka@who.int
Ms Sarah Skeen, Technical Officer, Mental Health Policy and Service Development, MSD
Email: skeens@who.int
THE CONTEXT
1. COUNTRY DEMOGRAPHIC AND SOCIOECONOMIC PROFILE

GEOGRAPHY AND CLIMATE
The Hashemite Kingdom of Jordan is located in the Eastern Mediterranean region, sharing borders with Saudi Arabia, Iraq, Syria, Israel and the West Bank. It is almost entirely landlocked, with the port of Aqaba in the far south its only link to the sea. The land area is over 89,000 sq. km. There are limited natural water resources, droughts are common and there are periodic earthquakes. Current human threats to the environment include deforestation, over-grazing, soil erosion and desertification (6-8).

DEMOGRAPHICS
Jordan's population of 6187 000 (9) is heavily concentrated in its cities. The overall population density is 66 people per sq. km (10) and the majority are concentrated in Jordan's urban centres.

Jordan has a large youth population, with approximately 37.5 % of the Jordanian population under 15 years old, whereas only 5.8% are over 60 years old (9). The shape of the current population pyramid reflects (Figure 3) the high average population growth rate, which can be explained by a combination of moderately high fertility rate and crude birth rate, low crude death rate, and a high influx of migrants and refugees (11).

The shape of the population pyramid in Figure 4 indicates that population growth will stabilise by 2050, shifting towards low fertility and low mortality, and markedly less migration (12). By 2050, the Jordanian population will have expanded to a total of 10.2 million people (12), and the current youth bulge will be counteracted as the size of the working age population, as well as those over retirement age, doubles.
**MIGRATION**

Since the mid-1970s, Jordan has been both a country of origin and a destination for migrant workers. Hundreds of thousands of well-educated and highly skilled Jordanians migrate for employment, mainly to oil-producing countries, and Jordan also receives semi-skilled workers from Egypt, Syria and Asian countries to work in its agrarian, semi-industrial and service-oriented economy (14). Due to its geopolitical location, Jordan has periodically received large influxes of refugees and migrant workers fleeing humanitarian emergencies and conflicts. Palestinians have made up the majority of refugee populations, with the United Nations Relief Work Agency (UNRWA) estimating that there are approximately 1.9 million registered Palestinian refugees living in Jordan (15). Jordan also received a large influx of Lebanese refugees during the 1975–1991 civil war, as well as large numbers of Iraqis and returning Jordanians during and after the 1991 and 2003 Gulf Wars (8). UNRWA manages the Palestinian refugee population within Jordan (as well as in Syria, Lebanon and Gaza and the West Bank), providing education, healthcare and relief and social services.
services within refugee camps (15), and the IOM assists the Jordanian government with managing the unexpected recent influx of Iraqi refugees, providing them with guidance on developing national instruments to protect victims of trafficking and enhancing Jordanian migration management and legislation (14). Other UN agencies such as WHO, UNHCR, UNFPA and UNICEF also provide assistance to Iraqi refugees based on their respective mandates.

CULTURE
Jordan's official language is Arabic and is used by the majority of the population, although English is widely understood by the upper and middle classes. The cultural composition of the population is not very diverse, with 98% of the population of Arab ethnicity, and 92% of the population practising the Sunni Muslim religion. There also exist small communities of people of Circassian, Armenian and Chechen origin (6, 7, 16).

GOVERNMENT AND ADMINISTRATION
Jordan is a constitutional monarchy, with executive authority vested in His Majesty the King and his Council of Ministers (Prime Minister and Cabinet). Legislative power rests in the bicameral National Assembly (Chamber of Deputies and Chamber of Senators). The country is administratively divided into 12 Governorates; each presided over by a governor appointed by the King. Governorates are grouped into three regions - the North region (Irbid, Jarash, Ajloun, and Mafraq), the Central region (Amman, Zarqa, Balqa, and Madaba), and the South region (Karak, Tafielah, Ma'an, and Aqaba). The major cities are Amman (the capital), Zarqa, and Irbid (7, 17).

DEVELOPMENT INDICATORS
The Human Development Index (HDI) is a composite score used by the United Nations Development Program (UNDP) to track achievements in three basic dimensions of human development; health and long life, knowledge and a decent standard of living. Figure 5 below shows that Jordan has experienced a continuous, positive trend in HDI since the 1980s, maintaining its overall rank above both the regional average for other Arab states and that of the world (18).

Figure 5
Human Development Index: Trends 1980-present

Source: reference (19)
Currently, Jordan's HDI is 0.700, ranking it 100th out of 187 countries with comparable data. Between 1980 and 2012 Jordan's HDI rose by 0.8% annually from 0.545 to 0.700 (19). Jordan's steady positive trend in human development is largely a result of unprecedented economic growth at the end of the 1970s and early 1980s, which was accompanied by improvements in social indicators, especially in education and health. Jordan achieved universal child immunization in 1988, and it has one of the lowest infant and maternal mortality rates in the Eastern Mediterranean Region. (7, 17, 18, 20).

Despite Jordan's positive HDI trend, there remain several long-standing development challenges. Jordan is one of the world's most water stressed countries and its economy is heavily reliant on foreign assistance due to these insufficient supplies of water, as well as oil and other natural resources. It is among the smallest of the Middle Eastern economies and is highly susceptible to external shocks from regional economic and political developments. Its position between two of the most insecure and politically unstable countries in the region - Palestine and Iraq - constitutes a major developmental challenge. The drop in oil prices in the late 1980s and the first Gulf War in the early 1990s led to an increased foreign debt, increased unemployment, a decrease in average per capita income, and the emergence of poverty as a problem in Jordan. Since then, unemployment and underemployment remain high, and pockets of severe poverty persist, with 14.2% of the population still living below the national poverty line (22).

In terms of the Millennium Development Goals, Jordan is on target to successfully reach, by 2015, the two milestones of universal primary education, and promoting gender equality by empowering women. If strategies are improved, it is also possible that Jordan will reach the milestones of eradicating extreme poverty and hunger, reducing child mortality, improving maternal health, ensuring environmental sustainability and combating HIV/AIDS, malaria and other diseases (21).

Detailed data for individual development indicators can be seen in Table 1 below, the components of which reflect Jordan's relatively high human development score.

Table 1
**Individual indicators of human development for Jordan**

<table>
<thead>
<tr>
<th>National Indicators</th>
<th>Indicator</th>
<th>Source: reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demography &amp; Population</td>
<td>Life expectancy at birth m/f</td>
<td>72/75</td>
</tr>
<tr>
<td></td>
<td>Under-5 mortality rate (per 1,000)</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Birth rate (per 1,000)</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Infant mortality (per 1,000 live births)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Maternal mortality ratio (per 100,000 live births)</td>
<td>63</td>
</tr>
<tr>
<td>2. Income &amp; the economy</td>
<td>GDP (USD)</td>
<td>28.87 billion</td>
</tr>
<tr>
<td></td>
<td>Country income group</td>
<td>upper-middle income</td>
</tr>
<tr>
<td></td>
<td>Poverty headcount ratio at $1.25 a day (PPP) (% of population)</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Poverty headcount ratio at national poverty line (% of population)</td>
<td>13.3</td>
</tr>
</tbody>
</table>

As can be seen from the above indicators, Jordan is a upper-middle income country, with less than 0.1% of its citizens living below the international poverty line of US$1.25 a day.
The development diamond in Figure 7 plots four key development criteria in Jordan against that of the lower-middle-income group average. In 2009, according to the World Bank, Jordan had similar rates of life expectancy, gross primary school enrolment and access to improved water source as the rest of the lower-middle-income countries, despite a drastically lower GNI per capita.

Figure 6
Development diamond for Jordan
2. CONTEXTUAL FACTORS INFLUENCING MENTAL HEALTH NEEDS AND SERVICES

ECONOMIC AND ENVIRONMENTAL CONTEXT

Jordan's position close to Palestine, Lebanon and Iraq has made it a key recipient of refugees from a number of humanitarian emergencies and conflicts.

UNRWA provides primary health care to over 1.9 million Palestinian refugees (2.6% of which they refer to as 'special hardship cases'), in a network of approximately 20 primary care clinics and 30 special care clinics (15, 17). They have recently received training in mental health to support them to establish psychosocial services through attendance at mhGAP workshops, provision of the mhGAP-IG and in the future some of their PHC workers will be part of the mhGAP trainings. There are also approximately 80 registered NGOs in Jordan that conduct activities related to mental health. This network of donor-driven mental health services creates a kind of "parallel" mental health system in Jordan, for non-Jordanians, that is funded on a short-term basis and is not covered by national health insurance schemes, making it unsustainable in the long term (3).

UNRWA estimates that there are currently about 1.9 million registered Palestinian refugees living in Jordan, and the second Gulf War in Iraq has pushed a further wave of Iraqi refugees into Jordan, in addition to tens of thousands of Lebanese and Iraqi refugees from conflicts in earlier decades (15). According to an IOM report on the psychosocial needs of Iraqis displaced in Jordan, over 50% of Iraqi families display 8 or more indicators of distress in their new lives, and 21% had previously been exposed to trauma, with corresponding high rates of depression and anxiety (between 60-80% of those with direct exposure to traumatic events) (25). A joint WHO, UNICEF and John Hopkins University survey in 2008 found that 16% of adult refugees reported depressive symptoms and 44% reported symptoms of severe emotional distress (26).

Political instability and conflict is a source of mental ill-health not only for non-Jordanians and refugees, but also for local communities who experience such volatility. Consultations for Jordan's 2004 Human Development report interviewed respondents from local urban communities, a large proportion of whom felt that stress from insecurity negatively impacted their mental health (27).

POLITICAL AND ECONOMIC FACTORS

Poverty and poor mental health exist in a vicious cycle. People living in poverty have fewer educational and employment opportunities and are exposed to adverse living conditions which combine to place them at higher risk of developing mental disorders (28). Furthermore, people with mental health conditions are at times unable to work because of their symptoms and can also be discriminated against, either losing existing work or being denied employment opportunities.

Given this nexus between mental ill-health and poverty, Jordan's economic situation, in which there are pockets of severe poverty put it at risk for increased rates of mental illness particularly among the poor. Similarly, negative cultural attitudes toward mental illness, stigmatisation and the lack of legal provisions to protect those with mental illness and disability from discrimination (dismissal, low wages, etc.) in Jordan all contribute to an increased risk of social alienation and unemployment, further fuelling the vicious cycle of poverty and poor mental health.
MENTAL HEALTH PROBLEMS AND TREATMENT IN JORDAN
3. BURDEN OF DISEASE AND TREATMENT GAP

PREVALENCE AND BURDEN OF DISEASE IN COUNTRY

There is no recent and reliable data on the prevalence of mental illness in Jordan. One 1997 study found the prevalence of psychiatric disorders among patients receiving care from primary health care centres to be 61%, higher than the rate of 47% reported in other Arab countries, and comparable with the highest rates (63%) reported in developed countries. The study concluded that this may be due to the long-term mental health consequences of the Gulf War (29). More recently, the Jordanian Psychiatrists Association in 2008 stated that the prevalence of mental illnesses in Jordan conforms with global figures, estimated at 15-20% of the population (30), which is less conservative than the generally accepted estimate of 13% global prevalence rate (31). The Jordanian government also estimates that there is a high prevalence of developmental disorders in Jordan, but does not specify precise figures (4).

TREATMENT AND SERVICE UTILIZATION DATA

Recent WHO combined data from Ministry of Health outpatient facilities and psychiatric hospitals indicates that the majority of people who attend mental health services are treated for schizophrenia, schizotypal and delusional disorders (50.5%), followed by mood disorders (35.5%). The remaining 14% are diagnosed with substance use disorders, neurotic, stress-related or somatoform disorders, disorders of adult personality or behaviour, and other conditions, including epilepsy and mental retardation (3).

A study in 2000 found gender differences in utilisation of mental health services in Jordan, with lower mental health service utilization by women. This lower rate of treatment-seeking could possibly be explained by a greater fear of stigma and social alienation, including the damaging of marriage prospects, amongst women who seek psychiatric help. The same study also found increased service utilization among elderly Jordanians (32). Table 2 shows treatment data reported in the 2011 WHO-AIMS Report on the Mental Health System in Jordan.

Table 2
Estimated number of people treated for mental disorders at select facilities in Jordan for 2010

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>Number of users treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>MoH outpatient facilities</td>
<td>17,080</td>
</tr>
<tr>
<td>MoH psychiatric hospitals</td>
<td>2,540</td>
</tr>
<tr>
<td>MoH forensic facilities</td>
<td>78</td>
</tr>
<tr>
<td>NGO private day treatment facility</td>
<td>50</td>
</tr>
<tr>
<td>Total users treated in MoH facilities*</td>
<td>19,748</td>
</tr>
<tr>
<td>Total users treated in all sectors**</td>
<td>30,382</td>
</tr>
</tbody>
</table>

Source: reference (3)

*including one day treatment facility run by a local NGO
**extrapolated from the fact that Ministry of Health facilities service approximately 65% of the general population, through a comparable number of facilities, as reported in the WHO-AIMS 2010 data (3)
**TREATMENT GAP**

Given that there is no national level data for population-based prevalence rates of mental illness in Jordan, the treatment gap has been estimated from a conservative perspective using the global rate of 13% prevalence together with the service utilization data reported in WHO-AIMS (Table 2). There are 6187000 people in Jordan and 62.5% of them are above 15 years old (9). Based on global prevalence rates (31), we can estimate that about 502693 adults in Jordan (13% of the 3866875 adult population) have had a mental disorder in the previous year, of which 116006 (3% of the adult population) have had a severe form. In 2010, 30382 people were treated for mental disorders. If we assume that most of the people in Jordan who were treated had a severe mental disorder then the treatment gap for severe mental disorders would be 73.8%. This means that only 26.2% people with severe mental health problems received treatment in 2010. If we consider the treatment rates for all severities of mental disorders then the treatment gap would be 94.0%. The estimated treatment gap is illustrated in Figure 7, below.

Figure 7
The estimated treatment gap for mental disorders in Jordan
MENTAL HEALTH WITHIN THE GENERAL HEALTH SYSTEM
4. MENTAL HEALTH WITHIN THE GENERAL HEALTH SYSTEM

Jordan’s has four major health providers: the Ministry of Health (MoH) which provides public and university hospital services, the military, the private sector, and non-governmental organisations or international agencies. Each provider has its own financing and delivery systems, and it is quite common that a Jordanian citizen uses more than one health provider, and is enrolled in more than one health insurance program (3).

The Ministry of Health (MoH) services consist of a network of 30 MOH hospitals (27 general hospitals, 1 psychiatric hospital, 1 mental hospital and 1 substance use treatment facility hospitals), 2 University Hospitals, 684 primary health care centres (3, 33). Figure 9 shows the current organization of the MoH, with eight main administrative bodies coordinating health care in the twelve Governorates. The Higher Health Council, which falls under the office of the Prime Minister, represents all health care providers and is responsible for coordinating mental health services. Representatives from the private sector, military services, and some NGOs participate in the development of national health policies through this council (17).

The military health services are called the Royal Medical Services (RMS). RMS offers secondary and tertiary level services (3). Although it is primarily responsible for providing health services to military and security personnel, the RMS has evolved to provide care to the family members of military personnel, and acts as a referral centre for civilian Jordanians who require certain types of highly specialized medical treatment.

The private sector provides services through a network of hospitals, the majority of which are concentrated in Amman, Irbid and Zarqa (see Figure 10). UNRWA provides primary health care to roughly 1.9 million Palestinian refugees (17), and there are also approximately 80 NGOs in Jordan that conduct activities relating to mental health, including running the country’s only mental health day treatment facility (3).

Table 3
Impact indicators for Jordanian general health care system, 2009 data

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2009 data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Beds per 1,000 population</td>
<td>1.8</td>
</tr>
<tr>
<td>Hospital Admissions per 1,000 population</td>
<td>14.1</td>
</tr>
<tr>
<td>% public (MoH and University Hospitals)</td>
<td>45.8%</td>
</tr>
<tr>
<td>% military (RMS)</td>
<td>18.7%</td>
</tr>
<tr>
<td>% private</td>
<td>35.5%</td>
</tr>
<tr>
<td>Average Hospital Occupancy Rate (%)</td>
<td>61.7</td>
</tr>
<tr>
<td>Average Length of Stay in Hospital (days)</td>
<td>2.9</td>
</tr>
<tr>
<td>Hospital Average Death Rate (%)</td>
<td>1.6%</td>
</tr>
<tr>
<td>Outpatient visits per 1,000 population</td>
<td>1,164.1</td>
</tr>
<tr>
<td>PHC Visits (MoH Centres) per 1,000 population</td>
<td>1,710.7</td>
</tr>
<tr>
<td>PHC Visits (MoH Centres) for Mental &amp; Behavioral Disorders per 1,000 population</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Source: reference (34)

The relatively low bed occupancy rate indicates that there is excess bed capacity. The total number of hospital beds across all sectors in Jordan is approximately 1.8 per 1,000 population (excluding psychiatric beds), but these are heavily concentrated in the capital Governorate of Amman, which has a concentration of 2.6 beds per 1,000 population as opposed to 1.3 beds per 1,000 population across the other 11 Governorates (for geographical spread, see Figure 12) (34). Figure 10 shows the mental health services in Jordan mapped onto the general health services.
Figure 8. The Health System in Jordan
Source: references (3, 4, 33, 35)
Figure 9. Mental health services mapped against the general health system

Source: references (3, 33, 35)

Public Health Sector

Services and facilities fully financed and supervised by the Ministries of Health, Interior or Social Development

Tertiary referral hospitals

- National Centre for Mental Health (NCMH), Balqa
  220 psychiatric beds in total
  78 secure forensic beds
  Outpatient facilities

- Al Karama Hospital, Amman
  125 psychiatric beds in total
  Outpatient facilities

- National Center for Addiction, Amman
  Residential facility
  <100 beds in total
  3 residential facilities for people with intellectual disabilities
  (Ministry of Social Development)
  1 residential facility for substance use run (Ministry of the Interior)

220 psychiatric beds in total

Outpatient facilities

2 Government University Hospitals

- 1,013 inpatient beds
- 1 psychiatric inpatient unit, Irbid
- 2 psychiatric outpatient facilities

27 General Hospitals

- 4,358 beds (no psychiatric wards or beds)
- Of these, 14 have psychiatric outpatient facilities

8 psychiatric outpatient clinics in prisons

Other Secondary Psychiatric Facilities

220 psychiatric beds

Outpatient facilities

Public primary health care

684 health care centers across the Governorates

- 70 comprehensive health centers
- 378 primary health centers
- 236 peripheral health centers

Of these comprehensive health centers 15 have psychiatric outpatient clinics and 2 of these are also community mental health centres

Community based

- 1 standalone psychiatric outpatient clinic, Amman
- 1 specialist psychiatric day treatment facility (run by local NGO)

Military Health Sector

Services and facilities fully financed & supervised by Royal Medical Services

Tertiary referral hospitals

- Psychiatric Hospital, Princess Aisha Medical Complex, Amman
  43 psychiatric beds,
  Outpatient facilities

- 2 general tertiary hospitals (1231 beds)
- 1 mental health outpatient facility, King Hussein Medical Centre

7 General Hospitals

~ 875 beds (see map for locations and beds)

Of these, 6 have psychiatric outpatient facilities

Private and Donor Health Sector

Facilities financed and managed by NGOs and private corporations

Tertiary referral hospitals

- Al Rashid Psychiatric Hospital, Balqa
  75 beds
  Outpatient facilities

- 1 x residential facility for substance abuse (<100 beds)
- 22 x specialist hospitals-e.g. maternity (1,444 beds)

38 General Hospitals

- 2,164 beds (no psychiatric wards/beds)

Of these, 18 have psychiatric outpatient

Other Secondary Psychiatric Facilities

- 8 psychiatric outpatient clinics
- 1 residential facility for substance use run (Ministry of the Interior)
- 22 x specialist hospitals-e.g. maternity (1,444 beds)

- 1 x residential facility for substance abuse (<100 beds)
COORDINATION

Mental health is poorly integrated within the general health structures and until late 2011 there was no single policy-making and budget-holding mental health authority. In the MoH there are three main mental health authorities: the Head of Mental Health Speciality, the Director of the National Center for Mental Health (NCMH) under the Hospitals Administration, and the Mental Health Unit under the Primary Health Care Administration. Under the new National Mental Health Policy and Plan, launched in January 2011, the Mental Health Unit under the PHC Administration is planned to become the central governance unit for mental health, with policy-making and budget-holding authority (4). It will be responsible for a range of activities, including providing direction for mental health service development, developing legislation, and establishing mechanisms to protect and promote human rights, and advocacy. In addition, a National Technical Committee for MH representing key stakeholders has been established to advise the MH unit and support its governing function. The National Technical Committee is permanent and chaired by the Secretary General of the MoH. Key stakeholders are the MoH, MoSD, MoE, universities and relevant professional associations and councils.

Currently there is a lack of coordination between the multiple health providers, and between the mental health sector and other sectors, particularly between the MoH and the Ministries of Social Development and Labor. There is also a lack of coordination between the public mental health system and local and international NGOs and agencies that provide a range of mental health interventions. This lack of coordination between policy-making and service-providing bodies has in the past led to overlap and duplication of services, rather than the provision of sustainable and needs-based services (4). However, in 2008 a Mental Health and Psychosocial (MHPSS) Coordination Group was established to tackle this problem. It meets monthly in order to coordinate the various actors working in the MHPSS field, and is currently chaired by WHO and International Medical Corps (IMC) with a strong involvement in the MoH. In 2011, the Ministry of Health began to take over coordination of this group.

At the level of service delivery, MoH mental health services are organized in terms of service areas (or Health Directorates), but the structure is nonetheless very centralized, with the majority of services concentrated at the hospital level in the capital and other major urban centres. Although Jordan’s primary health care system is well-developed, well-distributed and well-organized, mental health services are not integrated at the primary level and there are very few community mental health centres, with none for children and adolescents (3, 4). Between a quarter to a half of primary health care doctors make on average one referral per month to a mental health professional, and there is little to no interaction in the form of meetings, review of individual cases, co-ordination of activities or mental health training sessions between primary health care doctors and mental health professionals. Additionally, there is virtually no interaction between the mental health and non-traditional mental health systems (3).

LEGAL FRAMEWORK

There is currently no specific mental health legislation in Jordan. Four articles on mental health and substance abuse are included in the General Health Act, however these are limited. They cover the following areas:

Allocation of mental illness wards in general hospitals

- Voluntary or involuntary admission to mental hospitals or specialised wards
- Ministerial power to review involuntary admissions
- Discharge from mental hospitals or specialised wards

There are also legislative provisions concerning the legal obligation for employers to hire a certain percentage of employees that are disabled (including mentally disabled) but these are not routinely enforced. There are no legislative provisions concerning protection from discrimination (i.e. dismissal, lower wages, and housing allocation) solely on account of mental disorder (3).
MENTAL HEALTH POLICY AND PLAN

Jordan's National Health Strategy for 2008-2012 makes no specific mention of mental health, even where there is a focus on increasing services to 'special categories' of vulnerable patients, such as children, women, the elderly, and those subjected to violence (36). However, the MoH National Health Research Priorities for 2009-2012 mention non-communicable diseases, including neuropsychiatric conditions (drug use disorders, unipolar depressive disorders, obsessive-compulsive disorders, schizophrenia, and bipolar affective disorders), as one of the nine priority research areas for developing knowledge and information systems (37).

Although Jordan's general health strategy does not explicitly integrate mental health as a component, mental health policy has been progressively developed in Jordan since the late 1980s, when the National Centre for Mental Health was established (1987) and a plan for mental health service development was drafted (1988). This plan included the establishment of outpatient facilities, training of mental health workers, and the extension of mental health care to prisons. Nonetheless, mental health policy and services in Jordan remained highly centralized, fragmented, and uncoordinated.

HUMAN RIGHTS AND EQUITY

Currently, there is no national or regional level body that oversees the human rights of individuals living with mental illness in Jordan. In 2010, the national mental health users' association - "Our Step" - was established, to raise awareness about mental disorders, fight stigma in the community, as well as advocate for the human rights of people with mental conditions (3, 4).

There are no data on rates of involuntary admissions to Jordan's mental hospitals, however it has been estimated that between 6 to 10% of patients in MoH hospitals were physically restrained or secluded at least once in the last year (3).

Stigmatisation of mental health service users is an issue in Jordan, leading to discrimination in various areas including work and education, negatively influencing their integration into the community, and deterring or delaying treatment-seeking at mental health services (4). As an illustration of this, it has been reported that many Jordanian households caring for mentally disabled children are ashamed of these children's disabilities, and attempt to keep them out of sight of the community. This prevents open debate about the problem of mental disability and leads to underreporting and under treatment, despite the fact that NGOs and government provide support services (27). Stigma may also contribute to gender differences in mental health service utilization, as it has been reported that unmarried women in particular feel that treatment-seeking for mental illness may damage marriage prospects and married women feel that a psychiatric diagnosis could be used by the husband or his family as leverage for his remarriage (32).

Currently, there are no legislative provisions concerning protection from discrimination solely on account of mental disorder, no housing schemes for individuals with mental illness, no protection from discrimination in the allocation of housing for individuals with serious mental illness, and little to no financial support for individuals with mental disorders (who account for less than 4% of disability social welfare payments) (3, 4). According to the Jordanian government, negative attitudes towards mental illness and mental health service users pervade all sectors of society, including the professional and political levels. Such attitudes negatively influence the placement of mental health on the public health agenda, the allocation of adequate human and financial resources for mental health, and the integration of mental health services into the general health care system (4).
5. RESOURCES FOR MENTAL HEALTH

FINANCING

According to latest WHO estimates, Jordan’s total health expenditure is 9.8% of GDP and the per capita total expenditure on health is $178.5 USD. The estimated annual budget for the MoH is approximately $495 million USD or 6.1% of GDP (3). Figure 10 below shows that the public sector (MoH and RMS) accounts for over half of financing for health care, and a small portion of health financing comes from donors - both NGOs and UN agencies. The public sources of funding comprise tax revenue allocations from the Ministry of Finance to the MoH, RMS and Government University Hospitals, as well as user fees, payroll deductions, donor assistance and World Bank loans. Private sources of funding include premiums paid by individuals for private commercial insurance, employee insurance expenditures incurred by self-insured companies, and out-of-pocket expenditure for health care and for drugs at pharmacies (35).

Figure 10
Health financing by sector (% of total health budget)

Figure 11 below shows that health expenditures per sector roughly mirror health financing by sector, with the majority being spent in the public sector, followed by the private sector and a small but significant portion on NGO services and UNRWA clinics for Palestinian refugees.

Figure 11
Health expenditures per sector
Given that the mental health budget is incorporated within the MoH health budget, which currently does not dedicate a fixed amount for mental health services, it is impossible to accurately estimate the percentage of the total health budget allocated to mental health, and the per capita government expenditure on mental health is also unknown. The RMS dedicates a larger budget for mental health than the MoH. Despite recent efforts to shift attention and resources to the community in terms of provision of mental health services, the majority (estimated >90%) of financial resources for mental health are currently directed towards mental hospitals centralized in the bigger cities (3).

There are a large number of international NGOs and UN agencies intervening in Jordan in a number of different fields, including the mental health and psychosocial field, although these projects are often funded on a short-term basis, and so it is difficult to fully estimate the proportion of mental health financing and spending channelled through such actors (3).

### HUMAN RESOURCES

Table 5 presents human resources data across Jordan's health sectors. Fifty-eight percent of Jordan's physicians operate in the private sector, about double the number in the MoH. Conversely, 51% of Jordan's qualified nurses (i.e. not including assistant nurses) are in the public sector, as compared to 11% in the private sector, and 61% of Jordan's midwives are in the government sector. The UNRWA and the government University Hospitals each have a small staff; with roughly equal numbers of nurses to physicians, and the military sector is well-staffed at approximately half the capacity of the government sector.

| Health personnel (selected categories) by health sector in Jordan, 2009 data |
|---|---|---|---|---|---|---|
| | Ministry Of Health | RMS | King Abdullah University Hospital | Jordan University Hospital | Private Sector | UNRWA | Total |
| Physicians | 3,965 | 1,333 | 375 | 420 | 8,483 | 98 | 14,674 |
| Dentists | 653 | 245 | 0 | 66 | 3,389 | 30 | 4,383 |
| Pharmacist | 356 | 460 | 34 | 29 | 7,528 | 2 | 8,409 |
| Registered Nurses | 3,036 | 2,335 | 468 | 459 | 6,388 | 40 | 12,726 |
| Midwives | 1,203 | 140 | 17 | 0 | 593 | 32 | 1,985 |
| Assistant Nurses | 3,000 | 301 | 98 | 87 | 2,261 | 187 | 5,934 |
| Associate Degree Nurses | 1,581 | 1,783 | 0 | 112 | 0 | 0 | 3,476 |

Source: reference (33)

According to Table 4, Jordan's average density of health care workers across all professions is 12.4 per 10,000 population. According to the WHO Joint Learning Initiative report on human resources for health, this means that Jordan has a low density of health care workers (<25 per 10,000 = low, 25-50 = medium, >50 = high) (38). Nonetheless, the physician-to-population ratio is higher in Jordan than in most countries in the Eastern Mediterranean region or other lower-middle income countries (17).

The number of mental health professionals in Jordan is very limited, with the ratio of human resources dedicated to mental health versus general health estimated at around 1 to 130 professionals (4). It is estimated that in Jordan there are 6.2 mental health workers per 100,000 population, which is slightly higher than the regional Eastern Mediterranean average of 5.1 per 1000,000 population, although exact figures are unknown for both the public and private sectors in Jordan (3).
Table 5 below shows the latest WHO estimated breakdown of mental health professionals according to function. There are approximately double the number of psychiatrists as psychologists and other psychosocial workers, due in part to the fact that Jordan's mental health system remains oriented toward the medical model of care (4). A high proportion of Jordan's trained psychologists and social workers therefore tend to either work in fields other than mental health or seek vacancies with higher salaries in neighbouring countries (3), as opposed to the very small number (1-20%) of Jordan's psychiatrists who emigrate or leave the profession after completing their training (3). Many allied mental health professionals also leave the public health system to work in the humanitarian sector, as donor agencies offer more favourable working conditions for non-psychiatric mental health staff (nurses, psychologists, social workers, occupational therapists) than the public and private sectors in Jordan. Most of the qualified and experienced psychosocial staff is therefore recruited into the non-governmental and humanitarian sector in Jordan, or to health systems in neighbouring countries, resulting in the underservicing of private and governmental sectors by psychosocial staff (4).

Table 5
**Estimated number of mental health staff in Jordan, absolute and per 100,000 persons, 2010 data**

<table>
<thead>
<tr>
<th>Mental Health Staff</th>
<th>Estimated number per 100,000</th>
<th>Estimated absolute number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrist</td>
<td>1.09</td>
<td>61</td>
</tr>
<tr>
<td>Medical doctor (not specialized in psychiatry)</td>
<td>0.54</td>
<td>30</td>
</tr>
<tr>
<td>Nurse (not specialized in mental health)</td>
<td>3.95</td>
<td>221</td>
</tr>
<tr>
<td>Psychologist in mental health</td>
<td>0.27</td>
<td>15</td>
</tr>
<tr>
<td>Social workers in mental health</td>
<td>0.3</td>
<td>17</td>
</tr>
<tr>
<td>Occupational therapists in mental health</td>
<td>0.09</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: reference (3)

Despite the recent decentralization policy of the Ministry of Health, general health human resources remain centralized, with approximately 70% of physicians based in the capital Governorate of Amman, where only 36% of the population is based (3). The distribution of human resources in mental health is heavily concentrated in the capital city (e.g. 1.33 times the number of nurses in the capital versus the rest of the country), however many psychiatrists travel to outpatient clinics and other facilities outside Amman a few days a week to provide mental health services (3).

The spread of mental health professionals across the health sectors varies according to the type of health professional. Table 6 shows the spread of psychiatrists across health sectors, with 41% of these in the private sector, and 36% in the government-administered sector (under the Ministry of Health and Royal Medical Services, not including Government University Hospitals). Of the psychologists, social workers, nurses and occupational therapists working in mental health, 77% work for government administered mental health facilities and 22% for private facilities (3).

Table 6
**Number of psychiatrists in Jordan, by health sector, 2010 data**

<table>
<thead>
<tr>
<th>Health Sector</th>
<th>Number of Psychiatrists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Health</td>
<td>16</td>
</tr>
<tr>
<td>Royal Medical Services</td>
<td>12</td>
</tr>
<tr>
<td>Private Sector</td>
<td>25</td>
</tr>
<tr>
<td>Universities</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: reference (3)
The majority of mental health workers in psychiatric hospitals are nurses, with fewer psychiatrists, physicians and psychologists. Table 7 below shows this both in absolute terms and in terms of the number of health workers per bed in psychiatric hospitals.

Table 7
Number of mental health workers in psychiatric hospitals in Jordan, absolute and per bed, 2010 data

<table>
<thead>
<tr>
<th></th>
<th>Total number</th>
<th>Average number per bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrists</td>
<td>14</td>
<td>0.03</td>
</tr>
<tr>
<td>Other Physicians</td>
<td>13</td>
<td>0.03</td>
</tr>
<tr>
<td>Nurses</td>
<td>203</td>
<td>0.44</td>
</tr>
<tr>
<td>Psychologists</td>
<td>13</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Source: reference (3)

There are many unknown factors relating to the total number of human resources in mental health in Jordan, including the total numbers of “other” health or mental health workers in the system (including auxiliary staff, non-doctor/non-physician primary health care workers, health assistants, medical assistants), and the total number of staff working for non-governmental and international organizations providing psychosocial services in Jordan (3).
Table 8. Human resources across facilities

| Facility/level | General health | | Mental Health | | |
|---------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|               | Medical Doctor | Nurse | Occupational Therapist | Midwife | Social Worker | Pharmacist | Comm. Health Worker | Psychiatrist | Psychiatric Clinical Officer | Clinical Psychologist | Psychiatric Social Worker | Psychiatric Nurse | | | | | |
| TERTIARY LEVEL CARE (7 TERTIARY REFERRAL CENTRES) | | | | | | | | | | | | | | | | | | |
| National Centre for Mental Health | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | 165 | | | | | | | |
| National Centre for Addiction | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | 28 | | | | | | | |
| Al Karama Hospital | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | 33 | | | | | | | |
| TOTAL | 106 | 456 | NA* | 0 | 10 | 1 | 0 | 14 | 0 | 3 | 0 | 226 | | | | | | |
| Military tertiary referral hospitals (2) | | | | | | | | | | | | | | | | | | |
| Psychiatric Hospital Princess Aisha Medical Complex | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | | | | | | | | |
| King Hussein Medical Centre (outpatient services only) | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | | | | | | | | |
| Private and donor tertiary referral hospitals (25) | | | | | | | | | | | | | | | | | | |
| Al Rashid Psychiatric Hospital | 7 (psychiatric trainees) | NA* | 2 | NA* | NA* | 3 | NA* | 4 | NA* | 8 | | | | | | | | |
| 22 specialist hospitals (no psychiatric services) | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | | | | | | | | |
| Other residential facilities (4) | | | | | | | | | | | | | | | | | | |
| 3 residential facilities for people with mental disability (Ministry of Social Development) | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | | | | | | | | |
| 1 residential facility for substance use (Ministry of Interior) | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | NA* | | | | | | | | |

(*NA = information not available)
## SECONDARY LEVEL CARE

<table>
<thead>
<tr>
<th>Government University Hospitals (2)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>King Abdullah University Hospital</td>
<td>375</td>
<td>468</td>
<td>1</td>
<td>17</td>
<td>1</td>
<td>34</td>
<td>0</td>
<td>1</td>
<td>3-4 medical officers</td>
<td>0</td>
<td>0</td>
<td>20 MH nurses</td>
</tr>
<tr>
<td>Jordan University Hospital (no psych services)</td>
<td>420</td>
<td>459</td>
<td>NA*</td>
<td>0</td>
<td>NA*</td>
<td>29</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| General hospitals (27) |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Typical Average*       | 89.8            | 191.1           | NA*             | 20.1            | NA*             | 5.8             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| TOTAL                  | 2425            | 5158            | NA*             | 542             | NA*             | 160             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |

| Military secondary hospitals (7) |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Typical Small Facility          | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| Typical Large Facility          | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| Typical Average Facility        | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |

| Private and donor secondary hospitals (38) |  |  |  |  |  |  |  |  |  |  |  |  |
| Typical Small*                 | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| Typical Large*                 | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| Typical Average*               | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |

| Other secondary psychiatric facilities |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 outpatient facilities in prisons | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |

## PRIMARY LEVEL CARE

| Health care centres (684) |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Typical Small*            | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| Typical Large*            | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             | NA*             |
| Typical Average*          | 15-20           | 10              | 0               | 0               | 1               | 0               | 0               | 0               | 0               | 0               | 0               | 0               |

## COMMUNITY LEVEL CARE

<table>
<thead>
<tr>
<th>2 community mental health centres within comprehensive primary health centres (above) in Amman and Irbid</th>
<th>0</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>1</th>
<th>1</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 standalone psychiatric outpatient clinic (Istishariah), Amman</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>1 NGO specialist psychiatric day treatment facility</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>counselors</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1 private residential facility for substance use</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
</tbody>
</table>
TRAINING

Less than 1% of Jordan's general health budget is spent on training. Opportunities for mental health training and supervision for students from various academic backgrounds (medicine, nursing, occupational therapy, psychology and social work) are limited to psychiatric hospitals but in future the mental health units within the university hospitals will also become training sites. The best psychiatric training available for professionals is within the RMS, as RMS dedicates a larger budget to mental health than the MOH, and provides international training for mental health professionals (3, 35).

In terms of mental health training for primary health care workers, less than 5% of the undergraduate curriculums of both medical doctors and nurses are devoted to mental health, and the percentage of yearly refresher training in mental health for MOH primary health care doctors and nurses is equally low. This is comparable with other countries in the Eastern Mediterranean region. No training exists - either in colleges, vocational schools, or refresher courses - for non-doctor and non-nurse primary health care workers, including health inspectors. Undergraduate curricula for mental health workers lack adequate opportunities for clinical training and supervision (3, 4).

As part of WHO activities in Jordan, in September 2011, a commitment was made to continue with training of three multidisciplinary teams who have previously received training, as well as provide training for 60 new primary health care staff.

MEDICATIONS

Jordan's essential drug list contains antipsychotics, anxiolytics, antidepressants, mood stabilizers and antiepileptic drugs. While this list includes all the psychotropic medicines listed on the 2009 WHO Essential Psychotherapeutic Medicines list, reliability and continuity of supply is an issue. Three of the four mental hospitals in Jordan have at least one psychotropic medication of each therapeutic class (anti-psychotic, antidepressant, mood stabilizer, anxiolytic, and antiepileptic) available at their facility all year long. Eighty-four percent of mental health outpatient facilities, and almost all primary care clinics, have at least one psychotropic medication of each therapeutic class available in their facility or a nearby pharmacy, but these are neither consistently nor continuously available throughout the year. Primary health care doctors working in the public sector are allowed to prescribe psychotropic medications, but only in follow-up circumstances, not by initiating treatment.

More than 80% of Jordanians have health insurance, allowing free or almost free access to essential psychotropic medications. For uninsured Jordanians, psychotropic medications are still quite affordable, amounting to less than 2% of the minimum daily wage for antipsychotics and less than 4% of the minimum daily wage for antidepressants. Costs are slightly higher and medications slightly less affordable for non-Jordanians or refugees, although they are sometimes considered as uninsured Jordanians (3, 4).

INFORMATION SYSTEMS

The Jordanian Ministry of Health maintains a list of data items that should ideally be collected by all mental health facilities in the country, although in 2010 the MOH received data from only 50% of mental hospitals and from 53% of outpatient facilities. Jordan's four mental hospitals collect data on their number of beds, inpatient admissions, days spent in hospital and diagnoses. Data on the number of involuntary admissions or number of patients physically restrained is not systematically monitored. Of the outpatient facilities across health sectors in Jordan, approximately 73% collect and compile data on treatment rates, user contacts and diagnoses. Only a few reports were produced using the data provided to the MOH last year.
PUBLIC EDUCATION AND LINKS TO OTHER SECTORS

There are no coordinating bodies overseeing any public education and awareness campaigns on mental health and mental disorders, although there have been limited and infrequent campaigns led by NGOs and professional associations over the past five years.

Approximately 50% of Jordan's schools employ mental health professionals, although only a few of these have school-based promotion and prevention activities for mental health. Few police officers, judges and lawyers participated in educational activities on mental health during the past few years, even though approximately 2-5% of prisoners have psychosis and every prison sees at least one prisoner per month treated by a mental health professional.

Besides the education and criminal justice systems, other sectors that have links or formal collaboration with the mental health sector include child protection, employment, welfare and elderly departments, as well as the United Nations (3).
Figure 12. Distribution of hospitals in Jordan by type of mental health services offered

Irbid (1.8 beds/1,000 pop.)
- 8 MOH General Hospitals (648 beds)
  - 3 with MH outpatient facilities
  - King Abdullah University Hospital (683 beds)
  - psychiatric inpatient ward
  - psychiatric outpatient facilities
  - 1 RMS General Hospital - Prince Rashid Hospital (259 beds, with psychiatric outpatient facilities)
  - 4 Private General Hospitals (265 beds)
  - 3 Private Specialist Hospitals (ObGyn - 61 beds)

Mafraq (0.8 beds/1,000 pop.)
- 3 MOH General Hospitals (191 beds)
  - 1 with MH outpatient facility
  - 1 Private Specialist Hospital (Chest Disease - 40 beds)

Aljun (0.8 beds/1,000 pop.)
- 1 MOH General Hospital (105 beds)
  - MH outpatient facility

Balqa’ (0.6 beds/1,000 pop.)*
- 3 MOH General Hospitals (245 beds)
  - 2 with MH outpatient facilities
  - 1 MOH Psychiatric Hospital (National Centre for Mental Health)
  - psychiatric inpatient ward
  - psychiatric outpatient facilities
  - 1 Private Psychiatric Hospital (Al Rashid - 75 beds, outpatient facilities)

Jarash (0.8 beds/1,000 pop.)
- 1 MOH General Hospital (135 beds)
  - MH outpatient facility
  - 1 Private Specialist Hospital (ObGyn - 17 beds)

Ma’an (1.8 beds/1,000 pop.)
- 2 MOH General Hospitals (203 beds)
  - 1 with MH outpatient facility

Karak (2.2 beds/1,000 pop.)
- 2 MOH General Hospitals (207 beds)
  - 1 with MH outpatient facility
  - 1 RMS Military Hospital - Prince Ali Military Hospital (200 beds)
  - psychiatric inpatient ward
  - psychiatric outpatient facilities
  - 2 Private General Hospitals (68 beds)
  - 1 Private Specialist Hospital (ObGyn - 30 beds)

Zarqa’ (1.1 beds/1,000 pop.)
- 2 MOH General Hospitals (471 beds)
  - 1 with MH outpatient facility
  - 1 RMS Military Hospital - Prince Hashem Military Hospital (~ 210 beds)
  - adult & pediatric psychiatric outpatient facilities
  - 6 Private General Hospitals (290 beds)

Kathr (2.2 beds/1,000 pop.)
- 3 MOH General Hospitals (207 beds)
  - 1 with MH outpatient facility
  - 1 Private General Hospital (50 beds)

Tafilah (1 bed/1,000 pop.)
- 1 RMS General Hospital - Prince Zaid Hospital (86 beds)
  - psychiatric outpatient facilities

Aqaba (1.5 beds/1,000 pop.)
- 1 standalone psychiatric outpatient facility
  - 1 RMS General Hospital (Princess Haya Hospital - 120 beds)
  - 2 Private General Hospitals (79 beds)

Amman (2.7 beds/1,000 pop.)*
- 3 MOH General Hospitals (1,459 beds)
  - 1 with MH outpatient facility
  - 1 MOH Psychiatric Hospital (Al Karama Hospital - 125 beds, outpatient facilities)
  - 1 MOH Substance Abuse Hospital (National Center for Addiction - 70 beds)
  - 1 Private (NGO-run) Specialist Psychiatric Day Treatment Centre
  - Jordan University Hospital (531 beds)
  - psychiatric outpatient facilities
  - 3 RMS Hospitals:
    - King Hussein Medical Complex (Specialist Hospital Complex - 4 centres, approx. 1,000 beds, psychiatric outpatient facilities)
    - Queen Alia Military Hospital (231 beds)
    - Princess Alzahra Medical Complex (Psychiatric hospital with 43 psychiatric beds & outpatient facilities)
    - 23 Private General Hospitals (1,432 beds)
  - 16 Private Specialist Hospitals (1,296 beds)

Madaba (1.1 beds/1,000 pop.)
- 2 MOH General Hospitals (129 beds)
  - 1 with MH outpatient facility
  - 1 Private General Hospital (30 beds)

Aqaba (1.5 beds/1,000 pop.)
- 1 MOH General Hospital (105 beds)
  - MH outpatient facility

Zarqa’ (1.1 beds/1,000 pop.)
- 1 MOH General Hospital (135 beds)
  - MH outpatient facility
  - 1 Private Specialist Hospital (ObGyn - 17 beds)

Aljeen (0.8 beds/1,000 pop.)
- 1 MOH General Hospital (105 beds)
  - MH outpatient facility

Karaka (2.2 beds/1,000 pop.)
- 2 MOH General Hospitals (207 beds)
  - 1 with MH outpatient facility
  - 1 RMS Military Hospital - Prince Ali Military Hospital (200 beds)
  - psychiatric inpatient ward
  - psychiatric outpatient facilities
  - 2 Private General Hospitals (68 beds)
  - 1 Private Specialist Hospital (ObGyn - 30 beds)
Figure 13. Distribution of primary health care centres in Jordan by type

- **Irbid**: 9 comprehensive, 88 primary, 26 peripheral
- **Mafraq**: 9 comprehensive, 39 primary, 37 peripheral
- **Aljun**: 4 comprehensive, 14 primary, 10 peripheral
- **Balqa’**: 7 comprehensive, 40 primary, 25 peripheral
- **Madaba**: 2 comprehensive, 12 primary, 17 peripheral
- **Jarash**: 2 comprehensive, 17 primary, 9 peripheral
- **Karak**: 7 comprehensive, 36 primary, 32 peripheral
- **Tafilah**: 4 comprehensive, 10 primary, 8 peripheral
- **Zarqa’**: 7 comprehensive, 29 primary, 6 peripheral
- **Amman**: 13 comprehensive, 68 primary, 33 peripheral
- **Ma’an**: 3 comprehensive, 18 primary, 21 peripheral
- **Aqaba**: 3 comprehensive, 7 primary, 12 peripheral
- **Irbid, Aljun, Jarash, Naraba, Mafraq, Al Balqa’, Madaba, Az Zarqa’, Al Karak, At Tafilah, Amman, Ma’an, Aqaba**
### Table 9. Service utilization in Jordan

<table>
<thead>
<tr>
<th>Facility/Level</th>
<th>GENERAL HEALTH</th>
<th>MENTAL HEALTH INPATIENT</th>
<th>MENTAL HEALTH OUTPATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number of Beds</td>
<td>Total Number Contacts</td>
<td>Average length of stay</td>
</tr>
<tr>
<td><strong>Facility/Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Facility/Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Centre for Mental Health</td>
<td>222</td>
<td>0</td>
<td>56% &gt; 10 years, 1% 5-10 years, 1% 1-4 years, 42% &lt; 1 year.</td>
</tr>
<tr>
<td>National Centre for Addiction</td>
<td>&lt;100</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Al Karama Hospital</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td><strong>Military tertiary referral hospitals (2)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Hospital Princess Aisha Medical Complex</td>
<td>43</td>
<td>0</td>
<td>NA*</td>
</tr>
<tr>
<td>King Hussein Medical Centre (outpatient only)</td>
<td>20</td>
<td>NA*</td>
<td>0</td>
</tr>
<tr>
<td><strong>Private and donor tertiary referral hospitals (25)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al Rashid Psychiatric Hospital</td>
<td>75</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>22 specialist hospitals</td>
<td>1444 beds in total</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>3 residential facilities for people with mental disability (Ministry of Social Devel.)</td>
<td>315</td>
<td>0</td>
<td>NA*</td>
</tr>
<tr>
<td>1 residential facility for substance use (Ministry of Interior)</td>
<td>&lt;100</td>
<td>0</td>
<td>NA*</td>
</tr>
</tbody>
</table>
# SECONDARY LEVEL CARE

<table>
<thead>
<tr>
<th>Government University Hospitals (2)</th>
<th>683</th>
<th>NA*</th>
<th>NA*</th>
<th>NA*</th>
<th>NA*</th>
<th>NA*</th>
<th>NA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>King Abdullah University Hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jordan University Hospital</td>
<td>531</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Total</td>
<td>1013</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>General hospitals (27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4358</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Military general hospitals (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Small*</td>
<td>120</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Typical Large*</td>
<td>200</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Typical Average*</td>
<td>300</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Total</td>
<td>2131</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Private and donor general secondary hospitals (38)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Small*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Typical Large*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Typical Average*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Total</td>
<td>2164</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Other secondary psychiatric facilities</td>
<td>8 outpatient facilities in prisons</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
</tr>
</tbody>
</table>

# PRIMARY LEVEL CARE

<table>
<thead>
<tr>
<th>Health care centres (684)</th>
<th>0</th>
<th>NA*</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>NA*</th>
<th>NA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Small*</td>
<td>0</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Typical Large*</td>
<td>0</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>Typical Average*</td>
<td>0</td>
<td>NA*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
</tr>
</tbody>
</table>
### COMMUNITY LEVEL CARE

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Number</th>
<th>Location</th>
<th>Number</th>
<th>Location</th>
<th>Number</th>
<th>Location</th>
<th>Number</th>
<th>Location</th>
<th>Number</th>
<th>Location</th>
<th>Number</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 community mental health centres within comprehensive primary health centres (above) in Amman and Irbid</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>1 standalone psychiatric outpatient clinic (Istisharia)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>27279</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>1 NGO specialist psychiatric day treatment facility (outpatient only)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
<tr>
<td>1 private residential facility for substance use</td>
<td>&lt;100</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
<td>NA*</td>
</tr>
</tbody>
</table>

*NA = information not available*
FACILITIES AND SERVICES

Mental health care services in Jordan are shown in Figure 9 and mapped out by location in Figure 12. Inpatient and outpatient services for mental health are almost exclusively available at hospital facilities only. The care provided at both inpatient and outpatient facilities, is mainly medical (drug-based) care.

1. Specialist and forensic services

Inpatient services
Almost all psychiatric inpatient services in Jordan are provided through specialist hospitals. There are 4 psychiatric hospitals in Jordan and 1 specialist substance use facility. Across Jordan's mental hospitals, there are a total of 14 psychiatrists, 13 other medical doctors, 203 nurses and 13 psychologists (3).

Ministry of Health facilities are spearheaded by the National Centre for Mental Health (NCMH), situated in Balqa’. Of the 220 beds in this facility, 78 are designated for forensic patients. The NCMH is both an administrative institution and psychiatric hospital and oversees the activities of Al Karama Hospital (125 beds) in Amman which primarily serves as a facility for male patients with severe psychosis and the National Centre for Addiction based in Amman (100 beds).

The RMS provides specialist mental health services at the Psychiatric Hospital, Princess Aisha Medical Complex (43 beds) in Amman. This consists of both outpatient and inpatient services for army personnel and their families, as well as for referrals from the private sector and from other Arab countries. The inpatient unit comprises 43 beds. Its staff consists of consultants and a specialist psychiatrist, psychiatric nurses, a clinical psychologist, social workers, and an occupational therapist. As of 2011, specialized clinics in forensic psychiatry and child and adolescent psychiatry have been established.

Finally, there is a private psychiatric hospital called Al Rashid (75 beds) situated in Balqa’, which has a capacity of 75 beds.

Outpatient services
Each of the four psychiatric hospitals also has their own outpatient clinic. For example, the RMS Hospital, Princess Aisha has an outpatient department for chronic and severe psychiatric illnesses, as well as operating an emergency service.

Forensic services
Forensic services in Jordan consist of the 78 forensic beds at the NCMH noted above, as well as 8 clinics located in prisons.

Other residential services
There is 1 residential facility for substance use run by the Ministry of the Interior. In addition, there are also 3 residential facilities (comprising 315 beds total) which are run by the Ministry of Social Development. These are for individuals aged 12 to 40 years with mental disabilities (mainly intellectual disability) (3). There is also 1 private residential facility for substance use of approximately 100 beds or less.

2. Psychiatric services within general hospital

Inpatient services
As noted above, psychiatric services are almost exclusively available in the psychiatric hospitals, with the exception of a mental health unit in the King Abdullah University Hospital in Irbid, which has an inpatient mental health unit which was opened in March 2011. This unit contains 20 beds, and is staffed by 1 psychiatrist, 3-4 medical officers and approximately 20 nurses with mental health training. As of early 2012, there were plans to build a second unit in the Jordan National University Hospital in Amman.
Outpatient services
There are 39 secondary-level psychiatric outpatient clinics belonging to the MoH in Jordan. Of these, 14 are based at MoH general hospitals, 8 are based in the prisons, 1 is a standalone clinic and the rest are placed within comprehensive primary health care centers. In addition, there are also 18 outpatient clinics based at private general hospitals, and 6 are based at RMS general hospitals. Of these, 3 outpatient facilities also provide services for children and adolescents, 1 at Jordan University Hospital and 2 at RMS hospitals. Eighty-four percent of outpatient facilities have at least one psychotropic medicine of each category available, but these are inconsistently supplied and so are not accessible on a reliable basis (3). A number of consultants and specialists in psychiatry also work in these outpatient departments, who participate in teaching medical and nursing students (2).

3. Mental health services through primary health care

Unlike the hospital system in Jordan, which is concentrated in the capital and other urban centres, the primary health care system in Jordan is widely distributed, encompassing all governorates including peripheral areas. Primary health care centres consist of 70 comprehensive centres (specialist centres), 378 primary centres (facilities with GP, nurse and midwife), and 236 peripheral centres which are usually not staffed by GPs. These centres are well-distributed, with an average patient travel time to the nearest centre of 30 minutes (17).

Mental health services are however only available at 15 of the 70 comprehensive centres which operate mental health outpatient clinics. Almost all comprehensive centres have at least one psychotropic medicine of each category available, but these are inconsistently supplied and so are not accessible on a reliable basis. Doctors in primary care facilities are able to prescribe psychotropic medicines for follow-up cases only, not to initiate treatment, and between one quarter and one half of full-time primary health care doctors make an average of one referral per month to a mental health professional. None of the primary of peripheral centres offers mental health services.

4. Formal community mental health services

There are very few formal community mental health care services in Jordan. Three MoH facilities been transformed into community mental health centres, with the support of WHO. One is a standalone mental health centre in Amman, and the other two are situated in comprehensive health centres in Amman and Irbid. A multidisciplinary team (comprising 2 psychiatrists, 1 nurse trained in mental health, 1 psychologist, 1 occupational therapist and 1 social worker) was established in each centre to implement the bio-psychosocial approach and the case management system, providing home visits and regular mental health care, follow-up and outreach. The functions of each of the centres include: early identification, diagnosis, treatment and follow up of patients; continued education, support and supervision of primary health care workers; collaboration with inpatient mental health services; promotion and awareness-raising of mental health issues in the community; collaboration with NGOs and human rights networks; promotion of the users association; and acting as a training centre for other multidisciplinary mental health teams (3). The standalone mental health centre in Amman, through an agreement with Jordan University, provides also children and adolescent mental health care, twice a month.

There is also one NGO-run mental health day treatment centre which offers community mental health care as well as vocational training, called the Jordanian Psychiatric Rehabilitation Society (SaSaf Centre). It is based in Amman, but receives people from all over Jordan for treatment. This day treatment centre treats approximately 20 people at any one time (3). It is staffed by 2 psychosocial counsellors, a social worker, an occupational therapist and a nurse, and management and support staff. It offers a range of vocational training, run by a manager and employing 7 trainers working in different areas. A psychiatrist from the National Centre for Mental Health does outreach visits to the facility.

The UNRWA provides primary health care services, including limited psychosocial care, to approximately 1.9 million Palestinian refugees in a network of approximately 20 primary care
clinics and 30 special care clinics (17). In 2009 alone, UNRWA primary health care facilities received over 2.5 million patient visits. Although there is no data for what percentage of these visits related to mental health needs, UNRWA noted that for the same period it treated over 50,000 'special hardship cases’ (2.6% of registered refugees), which are likely to have been individuals exposed to war trauma (15).

A mapping activity of all mental health and psychosocial support services for emergencies in Jordan mapped the activities of 27 different agencies working in emergency relief services. The activity revealed that most NGO activities working in this area were based in Amman. Services provided are mostly community-focused, and cover a range of activities, including clinical management, information dissemination, and strengthening of community and family support, amongst others.

There are also approximately 80 registered NGOs in Jordan that conduct activities related to mental health (3).

6. Informal community care

Some Jordanian mental health service users also make use of informal community systems like immediate and extended family, religious leaders, and in particular traditional healers. This informal care is often used in addition to psychiatric treatment.

Traditional and religious healers
Traditional and religious healers are frequently used in Jordan, as a complementary service to psychiatric treatment, and serve to reinforce cultural explanations that impute an external locus of control upon mental health problems. Etiologies are often explained as having origins in God’s will, God’s hands, sorcery, evil eye (Hasad) or attacks from evil-spirits (Darbah), and such beliefs may contribute to a lower rate of psychosocial or psychiatric treatment-seeking, and increased utilization of traditional or religious healers (32).

One study from 2000 found that 85% of women consulted traditional healers before and during their psychiatric treatment, and an additional 15% reported that they visited saints' tombs. Thirty percent of men likewise saw traditional healers before and during treatment, and 70% consulted religious leaders and Koranic healers (32). There is virtually no interaction between mainstream mental health services and traditional practitioners (3).

Consumer support groups
"Our Step", a consumer association for individuals affected by mental health problems, was established in Jordan in October 2010 by a group of service users, mental health professionals, the WHO, and the Ministries of Health and Social Development. In collaboration with the Greater Amman Municipality, the group established its premises in Rusaifa.

The first main objective of the association is to reduce stigma associated with mental illness, through education for the general public and raising awareness of mental health, imparting information and knowledge on specific concerns relating to mental health, encouraging the provision of community services to users of mental health services, the undertaking of activities and campaigns to facilitate community integration of the association’s members, and organizing a series of public lectures. The second is to serve as an advocacy group for mental health users and their families.

Up until September 2011, financial and technical support had been provided by WHO, with plans to seek the support of the Jordan ministries and other local and international NGOs of interest in this field. The Key achievements since its establishment have been the the election of administrative committee to undertake the duties and responsibilities of the association's work, training on Human Rights provided to mental health services users and family members, training sessions on building capacity for the skills needed for the administrative committee's members and finding a premises to host the association.
7. Self-care

Self-care as a mode of management is not formally supported by the mental health system in Jordan. While there may exist an informal style of family-care for specialized populations with mental illness or disability, there are some limitations to the possibility of effective and supportive family care for certain sub-groups of the population, including traditional explanations for mental illness, based in divine and spiritual sources, which are often deployed by families in order to mitigate the stigma attached to mental illness, reducing the individual's independence and capacity for agency and action to seek treatment.
The WHO Pyramid of Care and the reality in country

Figure 14 (a) and (b). The WHO Pyramid of Care and the reality in country

Illustration of the reality of mental health care in Jordan

The levels of care that are non-existent, poorly developed or inappropriate have been removed from the pyramid of care. Several specialised facilities remain, as well as outpatient facilities in general hospitals, and (minimal) primary care services. Informal services, like community care and self-care, are currently not viable alternatives, although the complimentary use of traditional and religious healers means that informal community care makes up a small part of total mental health service utilization.
BIBLIOGRAPHY

INTERNET RESOURCES

Mental health and development: Targeting people with mental health conditions as a vulnerable group

The WHO Mental Health Policy and Service Guidance Package

- The mental health context
- Mental health policy, plans and programmes - update
- Organization of services
- Planning and budgeting to deliver services for mental health
- Mental health financing
- Mental health legislation & human rights
- Advocacy for mental health
- Quality improvement for mental health
- Human resources and training in mental health
- Improving access and use of psychotropic medicines
- Child and adolescent mental health policies and plans
- Mental Health Information Systems
- Mental health policies and programmes in the workplace
- Monitoring and evaluation of mental health policies and plans

### Essential psychotherapeutic medicines

(***WHO Model List of Essential Medicines, 16th list, March 2009***)

Where the [c] symbol is placed next to the complementary list it signifies that the medicine(s) require(s) specialist diagnostic or monitoring facilities, and/or specialist medical care, and/or specialist training for their use in children.

<table>
<thead>
<tr>
<th>Psychotic disorders</th>
<th></th>
</tr>
</thead>
</table>
| Chlorpromazine      | Injection 25 mg (hydrochloride)/ml in 2ml ampoule  
Oral liquid 25 mg (hydrochloride)/5 ml  
Tablet 100 mg (hydrochloride) |
| Fluphenazine        | Injection 25 mg (decanoate or enantate) in 1ml ampoule |
| Haloperidol         | Injection 5 mg in 1ml ampoule  
Tablet 2 mg; 5 mg |

**Complementary list [c]**

| Chlorpromazine      | Injection: 25 mg (hydrochloride)/ml in 2-ml ampoule  
Oral liquid: 25 mg (hydrochloride)/5 ml.  
Tablet: 10 mg; 25 mg; 50 mg; 100 mg (hydrochloride) |
| Haloperidol         | Injection: 5 mg in 1-ml ampoule  
Oral liquid: 2 mg/ml  
Solid oral dosage form: 0.5 mg; 2 mg; 5 mg |

### Depressive disorders

| Amitriptyline       | Tablet 25 mg (hydrochloride) |
| Fluoxetine          | Capsule or tablet 20 mg (present as hydrochloride) |

**Complementary list [c]**

| Fluoxetine          | Solid oral dosage form: 20 mg (present as hydrochloride)  
a >8 years |

### Bipolar disorders

| Carbamazepine       | Tablet (scored) 100 mg; 200 mg |
| Lithium carbonate   | Solid oral dosage form: 300 mg |
| Valproic acid       | Tablet (enteric coated): 200 mg; 500 mg (sodium valproate). |

### Generalized anxiety and sleep disorders

| Diazepam            | Tablet (scored): 2 mg; 5 mg |

### Obsessive-compulsive disorders and panic attacks

| Clomipramine        | Capsule 10 mg; 25 mg (hydrochloride) |

### Medicines used in substance dependence programmes

| Nicotine replacement therapy | Chewing gum: 2mg, 4mg  
Transdermal patch: 5mg to 30mg/16 hrs; 7mg to 21mg/24 hrs |

**Complementary list [c]**

| Methadone*           | Concentrate for oral liquid 5 mg/ml; 10 mg/ml  
Oral liquid 5 mg/5 ml; 10 mg/5 ml |

*The square box is added to include buprenorphine. The medicines should only be used within an established support programme.*

Source: reference (39)
REFERENCES
