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Maternal, child and adolescent mental health

Challenges and strategic directions for the Eastern Mediterranen Region

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Foreword

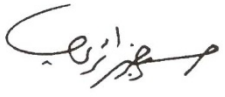
In the Name of God, the Compassionate, the Merciful

In the World Health Organization's definition of health, the physical, mental and social aspects of health stand out as equally vital and intricately interwoven. Today, we know that as many as 450 million people worldwide suffer from mental, neurological and substance use disorders. One in four families has at least one family member with a mental disorder. Mental and behavioural disorders account for 14% of the global burden of disease. Almost three quarters of the global burden of mental and behavioural disorders is in countries with low and lower-middle incomes. Stigma and discrimination faced by people suffering from neuropsychiatric disorders and their families compounds the problem.

At the regional level, the WHO Eastern Mediterranean Region is a region in transition. With approximately 60% of the population under 19 years of age, high population growth rates and a rapidly evolving sociocultural ethos, the Region is increasingly vulnerable to the stresses of globalization on one hand and to disasters, emergencies and conflict on the other. This poses a constant threat to the physical and mental health of the population, especially that of the most vulnerable and disadvantaged population groups, including women, children and adolescents.

In most countries, rates of emotional disorders among women are twice that of men. However, it is alarming to note that some of the recent studies have shown that the rates of postpartum mental illnesses in countries of the Region are far higher than the global rates. This has potentially serious implications, not only for the health of mothers but of their children as well. The closely intertwined relationship between mothers and their children makes it impossible to address the mental health of one without considering the other. Yet, generally speaking, maternal, child and adolescent mental health services are scanty in the region and, until now, no regional strategic directions for maternal, child and adolescent mental health existed.

The strategic directions outlined in this publication were endorsed by the WHO Regional Committee for the Eastern Mediterranean at its 57th session in October 2010. They draw on the present strengths and opportunities unique to the Region, and are based on best available evidence. The challenge lies in their implementation. I urge Member States to spare no effort and expense in realizing the stated objectives of this strategic document and I reiterate WHO's commitment to providing technical support to this end. The task ahead is not an easy one, but it is vital for the well-being of mothers, children and adolescents, and hence the future of our Region.



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1. Introduction

> *The rate of mental disorders and the need for care is highest among disadvantaged people – yet these are precisely the groups with the lowest access to appropriate services. At the same time, fear of stigma leads many to avoid seeking care. The consequences are enormous in terms of disability, human suffering and economic loss. We have a pressing obligation to scale up care and services for mental disorders, especially among the disadvantaged, while stepping up efforts to protect the human rights of those affected.*
>
> UN Secretary-General Ban Ki-moon *(1)*

Mental health is an integral part of health and is inextricably linked to physical and social well-being. WHO has proposed a definition of mental health as "A state of well-being in which the individual realizes his/her own abilities, can cope with normal stresses of life, can work productively and fruitfully and is able to make a contribution to his/her community". Mental health is determined by the interaction of social, psychological and biological factors at individual, family and societal levels, as is mental ill health. Mental health contributes to the human, social and physical capital, while mental ill health is associated with social disadvantage, human rights abuses, and poor health and productivity, as well as increased risk of mental disorders (*2*).

The ten recommendations of The World Health Report 2001 serve as WHO's vision for the improvement of mental health systems to reduce the burden of mental disorders. These recommendations are: 1) providing treatment in primary care; 2) making psychotropic drugs available; 3) providing care in the community; 4) educating the public; 5) involving communities, families, and consumers; 6) establishing national policies, programmes and legislation; 7) developing human resources; 8) linking with other sectors; 9) monitoring community mental health; and 10) supporting more research *(3)*.

WHO Executive Board resolution EB109.R8 called on Member States to adopt the recommendations of The World Health Report 2001. The World Health Assembly in resolution WHA55.10 urged Member States to reaffirm the provisions of the Executive Board resolution, to strengthen action to protect children from and in armed conflict, to increase investments in mental health and to provide support to WHO's global action programme for mental health.

The WHO Director-General launched the mental health gap action programme (MhGAP) in October 2008 as a priority programme for the next six years aimed at effective and humane care for all with mental, neurological, and substance use disorders. The goal of the programme is to close the gap between what is urgently

needed and what is currently available to reduce the burden of mental, neurological and substance abuse disorders worldwide. Among the priority conditions identified for action in the MhGAP are child and adolescent mental disorders. In this programme eight of the 22 countries of the Eastern Mediterranean Region were identified for intensified support based on a mix of criteria ranging from burden of mental ill health to readiness of the country to take up the programme. These countries are Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Jordan, Pakistan, Sudan and Yemen *(4)*.

Mental, neurological and substance use disorders are prevalent across the globe and contribute to both morbidity and mortality. An estimated 14% of the global burden of disease has been attributed to neuropsychiatric disorders**.** Disability is responsible for most of the burden attributable to mental, neurological and substance use disorders, accounting for 31% of all the years lived with disability. By 2030 depression alone is likely to be the second highest cause of disease burden. Mental disorders also contribute to mortality. According to WHO's 2005 estimates, neuropsychiatric disorders, excluding alcohol and substance use disorders account for 1.2 million deaths every year and 1.4% of all years-of-life lost. These are almost certainly underestimates, since the report attributes death by suicide to intentional injuries (*5*).

Despite the huge burden of mental illness, few resources are directed towards mental health care. Mental health spending in many countries in the world is less than 1% of their health budget and the number of mental health professionals is grossly deficient. Resources for mental health are particularly sparse in low-income countries. Moreover, the scarce resources that are available are often inefficiently used and inequitably distributed, resulting in treatment gaps as high as 76%–85% in low and middle-income countries. Even for those who receive some treatment, the proportion who receive effective and humane treatment is small[6].The service gap, for maternal, child and adolescent mental health services is particularly high and the degree of coverage and quality of services for the young are generally worse in comparison with adults *(7)*.

Sections 2 and 3 explore in greater detail the evidence relating to maternal child and adolescent mental health globally and in the Region. Section 4 outlines the strategic directions endorsed by the WHO Regional Committee for the Eastern Mediterranean at its 57th session in October 2010 to tackle these challenges.

2. Situation review

2.1 Global situation

Mental health is a public health issue, not only for conceptual reasons but also because of the magnitude of the burden of mental ill health. An estimated 450 million people worldwide are affected by mental, neurological and substance use disorders, 154 million people suffer from depression and 25 million people from schizophrenia; 91 million people are affected by alcohol use disorders and 15 million by drug use disorders**.** As many as 50 million people suffer from epilepsy and 24 million from Alzheimer disease and other dementias *(8)*.

An estimated 14% of the global burden of disease has been attributed to mental, neurological and substance use disorders, mostly due to the chronically disabling nature of depression and other common affective, anxiety, stress-related, psychotic, alcohol and substance-use disorders (Table 1). Of all the years of life lived with disability, 31.7% are attributable to neuropsychiatric conditions. Unipolar depression (11.8%), alcohol use disorders (3.3%), schizophrenia (2.8%), bipolar affective disorder (2.4%) and dementia (1.6%) are the five major contributors. Furthermore, childhood and adolescent psychiatric disorders such as attention deficit hHyperactivity disorder (ADHD), conduct disorder, learning disorders, mood disorders and pervasive development disorders were not included in the calculations of the disability-adjusted life years (DALYs). Neuropsychiatric disorders also contribute to mortality, accounting for 1.2 million deaths each year, 1.4% of all the years of life lost. These are certainly underestimates as death by suicide is attributed to intentional injury. Around 877 000 people die by suicide every year. A systematic review of psychological autopsy case control studies identified mental disorders as important proximal risk factors for suicide. The median prevalence of mental disorders was 91% in suicide completers and the proportion of cases of suicide which would not have occurred in the absence of mental disorders was 47%–74% *(9)*. WHO estimates that by 2020, this annual rate will have risen to 1.5 million, and suicide will represent 2.4% of the global burden of disease (*10*).

Community-based epidemiological studies have estimated lifetime prevalence rates of mental disorders in adults at 12.2%–48.6% and 12-month prevalence rates at 8.4%–29.1% (*4*). The overall prevalence of mental disorders is almost the same for men and women (Table 2). However, rates of depression and anxiety disorders are higher in women, with a ratio of 1.5:1 and 2:1 (*8*). Furthermore, mental disorders increase the vulnerability to communicable and noncommunicable diseases, adding to the overall burden of disease. This vulnerability is mediated through complex multimodal interactions ranging from neurohormonal to psychosocial *(9)*.

Table 1. Ten leading causes of burden of disease, world, 2004 and 2030

2004			2030		
Disease or injury	**As % of total DALYs**	**Rank**	**Rank**	**As % of total DALYs**	**Disease or injury**
Lower respiratory infections	6.2	1	1	6.2	Unipolar depressive disorders
Diarrhoeal diseases	4.8	2	2	5.5	Ischaemic heart disease
Unipolar depressive disorders	4.3	3	3	4.9	Road traffic accidents
Ischaemic heart disease	4.1	4	4	4.3	Cerebrovascular disease
HIV/AIDS	3.8	5	5	3.8	Chronic obstructive pulmonary disease
Cerebrovascular disease	3.1	6	6	3.2	Lower respiratory infections
Prematurity and low birth weight	2.9	7	7	2.9	Hearing loss, adult onset
Birth asphyxia and birth trauma	2.7	8	8	2.7	Refractive errors
Road traffic accidents	2.7	9	9	2.5	HIV/AIDS
Neonatal infections and other conditions	2.7	10	10	2.3	Diabetes mellitus

Table 2. Prevalence of mental disorders

Country	**Percentage prevalence of any mental disorder (95% CI)**
China (Beijing)	9.1 (6.0–12.1)
China (Shanghai)	4.3 (2.7–5.9)
Belgium	12.0 (9.6–14.3)
Colombia	17.8 (16.1–19.5)
France	18.4 (15.3–21.5)
Germany	9.1 (7.3–10.8)
Iraq	
Italy	8.2 (6.7–9.7)
Japan	8.8 (6.4–11.2)
Lebanon	16.9 (13.6–20.2)
Mexico	12.2 (10.5–13.8)
Netherlands	14.9 (12.2–17.6)
Nigeria	4.7 (3.6–5.8)
Spain	9.2 (7.8–10.6)
Ukraine	20.5 (17.7–23.2)
USA	26.4 (24.7–28)

Source: *(8)*

Maternal, child and adolescent mental health

Studies conducted in developed countries estimate a 10%–15% prevalence of mental disorders in women during the perinatal period (perinatal period refers to period of pregnancy and up to one year after childbirth). The most frequent condition diagnosed during the perinatal period is depression followed by anxiety disorders. Symptoms of postnatal depression persist for at least one year in about 30% of women. Suicide accounts for 10%–20% of deaths in women up to one year after giving birth in both high-income and low-income countries. In studies where it was possible to make a diagnosis, 68% of the women were diagnosed as suffering from mental disorders. Perinatal mental disorders are associated with increased risk of worse reproductive health outcomes, including dyspareunia, dysmenorrhea, obstetric complications, preterm labour and increased mortality *(11)* (Table 3).

Maternal mental health not only affects women's ability to cope but has ripple effects on the family due to the multiplicity of roles mothers are expected to perform, including caring for the children. Maternal psychosis is associated with a two-fold increased risk of stillbirth or infant mortality (*9*). An estimated 200 million children from developing countries fail to achieve their developmental potential and maternal depression has been identified as one of the modifiable risk factors adversely affecting the physical, emotional, psychological and intellectual development of children which can extend well into adulthood (*12*,*13*). These adverse effects can be mediated through neurohormonal effects, impaired attachment and responsiveness, poor care provision, including early cessation of breastfeeding and nonutilization of available prevention and treatment programmes (*11*).

Table 3. Consequences of perinatal mental disorders

Mental disorder	Reproductive health outcomes	Child health outcomes
Depression	More obstetric complications	*Higher risk of*
	More visits to physicians and hospital admissions	Stunting
	More need for pain relief during labour	Underweight
	Increased maternal mortality through suicide	Diarrhoeal episodes
	Less uptake of contraceptives	Noncompliance with immunization schedule
	Negative experience of childbirth and development with consequent less stimulation/play with the child	Difficult temperament
		Poor cognitive, emotional and behavioural development
Anxiety	Preterm labour	*Higher risk of:*
	More visits to physicians and hospital admissions	Difficult temperament
	More need for analgesia during labour	Impaired cognitive, intellectual and motor development
		Hyperactivity and inattention
		Delayed physical growth gastrointestinal infections
Psychosis	Increased rates of hospitalization	Increased rates of infant mortality

Source: *(13)*

According to The World Health Report 2001, 20% of children and adolescents worldwide suffer from disabling mental illness. Child and adolescent neuropsychiatric disorders in males and females respectively are responsible for 27%–30% of the DALY's lost *(3,7)*. Approximately 50% of all mental disorders in adults have an onset before the age of 14 years *(7)*. The more common neuropsychiatric disorders in children and adolescents include intellectual disability/mental retardation, ADHD, conduct disorders, epilepsy, depressive illness and substance abuse. In high-income countries the prevalence of severe and moderate intellectual disability/mental retardation is estimated to be 3–4 per 1000 and 30 per 1000 respectively *(14,15,16)*. ADHD has an estimated prevalence of 3%–11% and it tends to decrease as the children mature into adulthood (*12*). Conduct disorders have an estimated lifetime prevalence of 2%–10%, with higher rates in adolescents as compared to children (*17*). The prevalence rates for epilepsy range from 5–8 per 1000 while the incidence rates are approximately 43 per 100 000 (*12*).The twelve month prevalence estimates for depressive illness range from 1% to 11% with higher rates in adolescents (*18*). Substance use in adolescents 12 years or older is estimated to have a lifetime prevalence of 5%–10% (*17*).

The resources available for maternal, child and adolescent mental health services are deficient throughout the world. In 2005, only 14 of the 191 countries worldwide had a clearly articulated, specific child and adolescent mental health policy, while the countries having a specific programme was even lower *(7)*. Epidemiological survey data at national level related to child and adolescent mental disorders were available in 8 of the 20 high-income countries reporting for the WHO ATLAS project, while only 1 of the 16 low-income countries had any such data (*7*).

According to The World Health Report 2001, 4%–6% of the children suffering from mental disorders (20%) are in need of clinical care. This translates into 5%–20% of the population in need of child and adolescent mental health services (*7*). The service gap ranges between 20% and 80% globally and the median treated prevalence rate is 0.16% for children and adolescents (*19*).

Globally, only 3% of the mental health outpatient facilities are specifically providing care to children and adolescents. The median percentage of women treated in outpatient facilities is 49% and the percentage of children and adolescents treated in these facilities is 12%. Day treatment facilities that specialize in treating children and adolescents are available only in one third of the reporting countries. Such facilities are reported to exist in about 20% of the countries in the South-East Asia, Western Pacific and Americas regions, and in two thirds or more of the African and European countries. The median percentage of women treated in day treatment facilities is 47% and the percentage of children and adolescents treated in these facilities is 5% globally. The proportion of women patients in community-based psychiatric inpatient units is about 42% and use of these facilities by children and adolescents is about 6%. The admission rate of women to mental hospitals is 38% while the

percentage of children and adolescents treated in mental hospitals remains low: from 3% to 6% (*19*).

The number of child psychiatrists ranges from 1 to 4 per million of the population in countries outside the north American and European region. More than 50% of the 67 countries participating in the ATLAS project globally identified paediatricians as the providers of mental health care while only 25% of the paediatricians in these countries were reported to have any mental health training and less than 10% of the care is provided in primary health care. There is rarely any identifiable budget for child and adolescent mental health, and in most countries outside the European region mental health care costs for this age group are most often paid out of pocket (*7*,*19*).

The full impact of mental disorders extends well beyond the direct costs and burden of disease calculations. Individuals suffering from mental disorders and their families often experience stigma and discrimination. This stigmatization and discrimination is not restricted to the general public but extends to the health services as evidenced by studies showing that individuals with mental disorders are less likely to receive care for comorbid physical conditions. Stigma and discrimination, with their attendant shame and embarrassment, also result in less than optimal utilization of available mental health services. This is a particularly important factor in children and adolescents avoiding mental health care.services (*19*). Stigma and discrimination also affect the educational and employment prospects of individuals suffering from mental disorders. Mental disorders also contribute to absenteeism and "presenteeism" through their impact on professional functioning, besides substantially affecting functioning in social and family spheres (*8*).

Not only are maternal, child and adolescent mental health issues inextricably linked to each other but it is also difficult to separate prevention, promotion and management strategies. There is evidence available of effective interventions for prevention, management of mental disorders and promotion of maternal, child and adolescent mental health which can be delivered in an integrated fashion in community, school and health care settings (Table 4). Early recognition and management of mothers with depression through the use of psychosocial and pharmacological interventions can have positive impact on their health outcomes as well as that of their children *(11,18)* (Table 5). Priority interventions to prevent learning and developmental disabilities include food fortification, vaccination of mothers against rubella, vaccination of children for *Haemophilus influenzae* and measles, removal of lead from fuels and paints and screening for Down syndrome and metabolic disorders (*14*) (Table 6).

Table 4. Preventive strategies for childhood and adolescent mental disorders

Disorders	Universal strategy	Selective strategy	Indicated strategy
Conduct problems and aggressive behaviour	Behaviour management Child social skills intervention Multimodal school programmes	Prenatal/early childhood programmes School or community-based programmes	School multimodal programmes for children at risk
Depression and depressive symptomatology	School-based programmes	Parenting interventions Interventions for infants and adolescents of depressed patients	Positive thinking programmes Self-help material Mass media
Substance-related disorders	Regulatory interventions for addictive substances Media intervention School-based prevention programme	Brief intervention for reducing hazardous alcohol/substance consumption	

Source: *(22)*

Table 5. Meta-analysis of interventions for perinatal mental disorders

Type of intervention	Number of intervention trials	Number of participants	Treatment effect (effect size)	*P*-value
Medication+CBT	1	30	3.871	<0.001
Medication	2	45	3.048	<0.001
Group	1	30	2.046	<0.001
IPT	4	181	1.260	<0.001
CBT	3	172	0.642	<0.001
Psychodynamic	1	95	0.526	0.014
Counselling	2	147	0.418	0.014
Educational	2	222	0.100	0.457

CBT: cognitive behavioural therapy
Group: group therapy with cognitive behavioural, educational and transactional analysis components
IPT: interpersonal therapy
Source: *(13)*

Table 6. Interventions to prevent learning and development disorders

Evidence	Primary prevention	Secondary prevention	Tertiary prevention
Evidence of cost-effectiveness available for low-income and middle-income countries	Food fortification (folic acid and iodine) Rubella and measles vaccine *Haemophilus influenzae* vaccine Removal of lead from paint and fuel Iron and iodine supplementation		
Evidence for cost-effectiveness available for high-income countries only		Prenatal screening for Down Syndrome and prevention of Down Syndrome birth Newborn screening for metabolic disorders followed by interventions to prevent disability	
Evidence for cost-effectiveness not available, but cost-effectiveness can be estimated from existing data	Malaria prevention	Early detection and care of neonatal jaundice Management of malaria Prevention and treatment of neonatal complications through emergency obstetric and paediatric services Detection and treatment of maternal thyroid disorders	Special education Occupational, physical and speech therapies Residential care Assistive devices
Evidence for cost-effectiveness not available, but potential for benefits exist	Fetal alcoholism Trauma prevention(bicycle helmets, burns) Prevention of shaken baby syndrome and child abuse	Dehydration/diarrhoea treatment Postnatal combined cognitive stimulation and nutritional intervention Therapeutic stimulants for treatment for ADHD	Community-based rehabilitation

Source: *(14)*

There is an extensive scientific basis for the benefits of home-based and centre-based stimulation on early childhood development. Randomized controlled trials (RCTs) have shown that centre-based and home-based early child care and development (ECCD) interventions can improve parental verbal interaction, behaviour management and attitudes towards the child. In malnourished children, the combination of nutritional supplementation and stimulation interventions appears to have a greater effect on cognitive development than either one alone (*20*,*21*). Adults born in poverty who participated in a quality preschool programme have higher social responsibility, education performance, earnings and property wealth, and greater commitment to marriage. Training parents of children with intellectual disabilities and pervasive developmental disorders (including autism), using culturally appropriate training material relevant for these disorders, can improve development, functioning and participation of the children within families and communities (*20*).

There is also evidence to suggest that school-based interventions, whether child-centered or environment-centered, can be effective in prevention of substance use disorders and promoting mental health outcomes, especially if they involve the parents and teachers as well. Early recognition and management of childhood and

adolescent mental disorders can substantially improve the outcome of disorders like ADHD. A multicomponent approach involving pharmacological, parental training and behavioural interventions is likely to yield better results than either of the approaches employed alone. Educational and psychosocial interventions in home and /or school settings have shown to be effective in management of conduct disorders (*22*).

Evidence suggests that a combination of pharmacological and psychosocial interventions is effective in management of depression in adolescents (*22*). A systematic review concluded that physician education in recognition and management of depression and restricting access to lethal means reduce suicide rates. Increased rates of prescription of antidepressant medication also correlate positively with reduced suicide rates in youth (*23*) (Table 4).

2.2 Regional situation

There are significant differences between countries of the Eastern Mediterranean Region in terms, not only of gross domestic product, sociodemographic construction and health indicators, but also of health system capacities and coverage. In some countries there is a significant shift towards an increasing chronic disabling noncommunicable disease burden while others face a double burden of communicable as well as noncommunicable diseases. Finally, a number of countries are still faced by an overwhelming burden of infectious diseases.

The population of the Region is young, with approximately 60% of its population 19 years of age or younger. Disasters, emergencies and conflicts present a continual challenge to health. Seven countries in the Region, making up about 40% of the regional population, are in complex emergency situations (*24*).A number of countries have experienced and, are at risk of, natural disasters, such as earthquakes, floods and droughts. Moreover, globalization, with its attendant rapid social changes and unplanned urbanization, has amplified life stresses and poses a constant threat to physical and mental health, particularly affecting the already vulnerable sections of the population, including mothers, children and adolescents.

In countries of the Region mental, neurological and substance use disorders account for 11.2% of the total burden of disease; addition of self-inflicted injuries increases this proportion to 12.4%. Unipolar depressive disorders account for 3.1% of the total burden of disease and are the leading neuropsychiatric cause of burden of disease, being especially prominent in aged women 15–44 years (*25*) (Table 7).

Table 7. Percentage of total DALYS caused by neuropsychiatric conditions, world and Eastern Mediterranean Region, 2004

	World			Eastern Mediterranean Region	
	Cause	**Percentage of total DALYs**		**Cause**	**Percentage of total DALYs**
	Neuropsychiatric conditions[a]	**14.4%**		**Neuropsychiatric conditions[a]**	**12.0%**
1	Unipolar depressive disorders	4.3%	1	Unipolar depressive disorders	3.7%
2	Alcohol use disorders	1.6%	2	Drug use disorders	1.2%
3	Self-inflicted injuries	1.3%	3	Schizophrenia	1.1%
4	Schizophrenia	1.1%	4	Bipolar disorder	0.9%
5	Bipolar disorder	0.9%	5	Mental retardation, lead-caused	0.8%
6	Other neuropsychiatric disorders	0.8%	6	Other neuropsychiatric disorders	0.8%
7	Alzheimer and other dementias	0.7%	7	Self-inflicted injuries	0.8%
8	Mental retardation, lead-caused	0.6%	8	Panic disorder	0.5%
9	Drug use disorders	0.5%	9	Epilepsy	0.5%
10	Epilepsy	0.5%	10	Migraine	0.4%
11	Migraine	0.5%	11	Obsessive-compulsive disorder	0.4%
12	Panic disorder	0.5%	12	Alzheimer and other dementias	0.3%
13	Obsessive-compulsive disorder	0.3%	13	Post-traumatic stress disorder	0.2%
14	Insomnia (primary)	0.2%	14	Alcohol use disorders	0.2%
15	Post-traumatic stress disorder	0.2%	15	Insomnia (primary)	0.1%
16	Parkinson disease	0.1%	16	Multiple sclerosis	0.1%
17	Multiple sclerosis	0.1%	17	Parkinson disease	0.1%

[a] This category also included self-inflicted injuries.

Community-based studies carried out in countries of the Region show estimated prevalence rates for mental disorders in adults ranging from 8.2% in the United Arab Emirates, 16.6% in Iraq and Pakistan, and 16.9% in Egypt and Lebanon, to 21% in Islamic Republic of Iran. In all these studies the rates of common mental disorders were significantly higher in women (*26–30*) (Table 8).

Suicide is one of the three leading causes of death for young people under 25. Globally every year, approximately one million people die by suicide and 86% of these are in low-income and middle-income countries (*9*). Countries of the Eastern

Table 8. Prevalence of mental disorder in countries of the Eastern Mediterranean Region

Countries	Percentage prevalence of any mental disorders (95% CI)
Egypt	16.9 (16.3–17.5)
Iran, Islamic Republic of	21 (14.9–25.9)
Iraq	18.8 (17.6–22.5)
Lebanon	16.9 (13.6–20.2)
Pakistan	16.6 (10–25.8
United Arab Emirates	8.2 (6.7–9.7)

Source: (*26–30*

Mediterranean Region do not officially report on suicide. However, small-scale studies have been done in some countries. In the Islamic Republic of Iran, a community-based study revealed lifetime prevalence for suicide thoughts, plans and attempts were 12.7%, 6.2% and 3.3%, respectively.

A systematic review showed the median rate of suicide in the Region to be 6.5 per 100 000. Studies conducted in Jordan found that the annual suicide rate during 1985–1990 was 2.1 per 100 000. In Lebanon, the lifetime prevalence of suicide ideation was 2.1% and for suicide attempts was 0.7%. In Pakistan a recent study showed that in the absence of any official data on suicide, the reported suicide rates varied from 0.4 to 2.9 per 100 000 population. A community-based study in an urban area of Casablanca, Morocco, showed the one-month prevalence of suicidal ideation to be 6.3% and of these 2.1% reported at least one suicide attempt during their lifetime (*31–33*).

Maternal, child and adolescent mental health

Women in general are at higher risk of common mental disorders. Recent epidemiological findings from low-income and middle-income countries, including those from the Eastern Mediterranean Region suggest that prevalence rates for perinatal mental health problems are more than twice as high as in high-income countries (15.8%–36%, and social stressors related to their roles and indicators of disadvantage account for this excess morbidity (*11*,*26*) (Table 9).

Recently, a series of studies from the Region has demonstrated that perinatal mental health problems in mothers is associated with increased risk of undernutrition, low birth weight, stunting (odds ratio 3.9, 4.0 and 4.4 respectively at 6 months and 2.5, 2.6 and 2.4 at 12 months of age), higher incidence of diarrhoeal episodes in the first year of life and failure to update the immunization status of the infants.

Table 9. Peri-natal depression in countries of the Eastern Mediterranean Region

Authors	Country	Results/Instruments
Ghubash R, AbouSaleh MT (1997)	Dubai, United Arab Emirates	24.5% SRQ 17.8% EPDS 15.8% PSE
Agoub M (2000)	Casablanca, Morocco	19.2%
Chaaya M et al (2002)	Beirut Bekaa Valley, Lebanon	16.4% 26.3%
Agoub M, Moussaoui D, Battas O (2005)	Casablanca, Morocco	20.1% EPDS 18.7% MINI
Rahman A, Iqbal Z, Harrington R (2003)	Kahuta, Pakistan	25-28% SCAN
Hussain N, Bevc I et al (2006)	Rawalpindi Pakistan	36% EPDS

SRQ: Self-reporting questionnaire
EPDS: Edinburgh Postnatal Depression scale
PSE: Present state examination
MINI: Mini international neuropsychiatric interview
SCAN: Schedule for clinical assessment of neuropsychiatric disorders

A prospective cohort study showed that postnatal depression persisted for one year postpartum in 56% of women as compared to rates of 30% in high-income countries. Persistence of postnatal depression is associated with increased risk of poor growth outcomes for infants and reduced uptake of child health promotion and disease prevention interventions targeting mothers (*34*).

Evidence from developing countries in other regions has demonstrated a negative association between perinatal mental health problems in mothers and mental-development quotient scores in infants at 6 months and poor performance in high-school entrance examinations in children aged 11–13 years (*11*,*34*,*35*)

A multicountry study including Sudan showed an estimated prevalence of mental disorders in children and adolescence aged 5–15 years of 12%.The rate of mental disorders was estimated to be 10% and the rate of mental retardation was estimated to be 2% (*36*). The weighted prevalence of mental disorders among school children in the United Arab Emirates was estimated to be 10.4% while a community-based study estimated a prevalence of 16.4% in 6–18 year olds. Conduct disorder and emotional disorders were more common in boys and girls, respectively. Studies carried out in Saudi Arabia estimated prevalence of emotional disorders to be 5.5%, while studies from Egypt estimate a prevalence of 4.5–10.25% with rates of emotional disorders higher in girls and rates of depression showing a positive association with age (*26*).

A recent study from Oman showed a 17% prevalence of depressive symptoms among adolescent secondary school students aged 14–20 years and a lifetime prevalence of mental disorders of 13.9%. Suicidal thoughts and plans in the last 12 months were reported by 1.96% and 1.36% of students, respectively. The utilization of any health services for management of mental health problems ranged between 6% and 12% *(37)*.

A study from Pakistan estimated the prevalence of emotional and behavioural disorders among 5–11 year old schoolchildren to be 34.4%–35.8% *(38)*. Studies from various countries of the Region on ADHD have estimated a prevalence of 0.46%–14.85% while a recent review on the subject concludes that the rates of ADHD are similar to other cultures (*26*,*39*) (Table 10).

Epilepsy affects more than 4.7 million people in the Region with the estimated prevalence at 9.4 per 1000 population (crude prevalence 4.04–21.2 per 1000) (*15*,*16*). Furthermore, in many countries of the Region, the age of first use for substances including alcohol is decreasing, and many individuals initiate use when they are under 19 years of age. Results from countries of the Region participating in the global school-based student health survey show that 15.5% of the students had considered suicide, while 5.2% had used drugs in the past 12 months and 11.8% had used alcohol in the past 30 days (*40*) (Figures 1 and 2). A study carried out in Egypt found that 8.8% of middle and senior school students were currently using drugs and the mean age of first use was 14.25 years (11.8–170 years) (*26*).

Table 10. Childhood and adolescent mental disorders in countries of the Eastern Mediterranean Region

Authors	Country	Results/Instruments
Giel R et al (1981)	Shagara Jebel Awlia, Sudan	10%–12%
Eapen V et al (1998)	Al Ain, United Arab Emirates (school-based)	Crude prevalence 23.9% Weighted prevalence 10.4% Behavioral disorders 16.5% ADHD 0.46%
Eapen V et al (2000)	Al Ain, United Arab Emirates (community survey)	16.4%
BuHaroon A (1999)	Sharjah , United Arab Emirates (school-based)	ADHD 14.85%
Abou El Fatouh AM (1996)	South-western Saudi Arabia	Emotional disorders 5.5%
Koura M (1991)	Alexandria, Egypt	Emotional disorders 4.7%
Seif Eldin A et al (1990)	Alexandria, Egypt	Depressive illness 10.25%–20.32% Conduct disorders 10%
Ehsan-ullah S et al (2009)	Karachi, Pakistan	Emotional and behavioural problems 34.4%–35.8%
AlRiyami A et al (2009)	Oman (school-based)	13.9% Depression 3% Anxiety 9% ADHD 0.2% Conduct disorder 0.2%

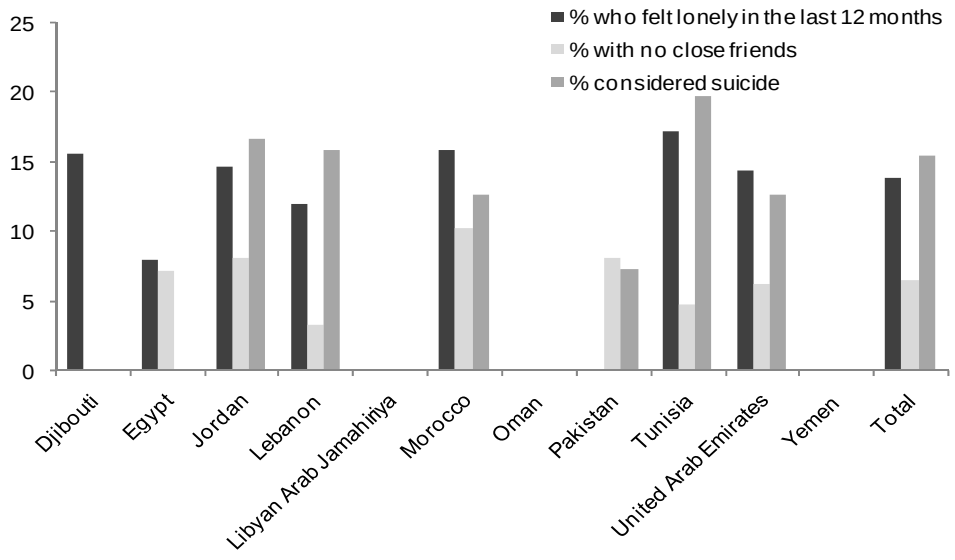

Figure 1. Schoolchildren with psychological distress in countries of the Eastern Mediterranean Region

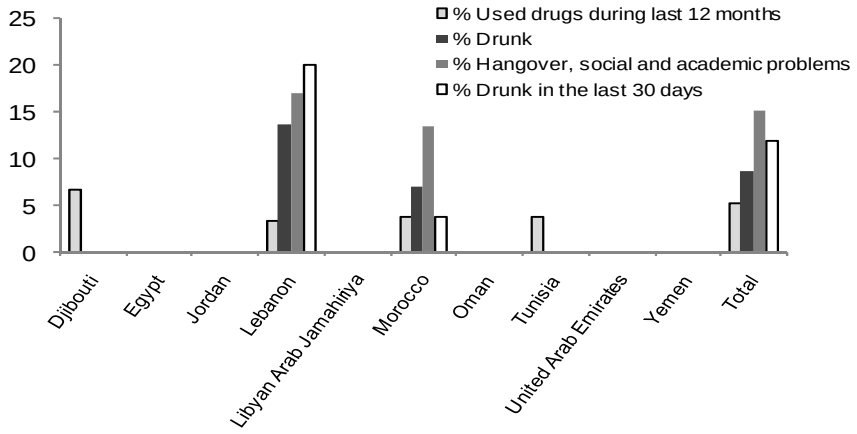

Figure 2. Schoolchildren using drugs and alcohol in countries of the Eastern Mediterranean Region

Studies carried out in countries experiencing complex emergencies have shown significantly higher rates of neuropsychiatric disorders among children and adolescents. Studies carried out in Iraq showed a point prevalence of childhood and early adolescence mental disorders of 37.4%. Post-traumatic stress disorder (PTSD), enuresis, separation anxiety, specific phobias, school refusal, conduct disorders and learning disability were among the most common disorders affecting children and adolescents (*41*). The estimated prevalence of PTSD varied from 14% to 30% among schoolchildren and adolescents in Iraq (*42*). A study carried out in Palestine reported a case incidence of emotional and behavioural disorders of 54.5% in boys and 46.5% girls (*43*). Estimates of PTSD range from 17.3% to 40% among children and adolescents (*44*). A study from Afghanistan involving 11–16 year old schoolchildren estimated a prevalence of 22.2% probable psychiatric morbidity, with emotional disorders, conduct disorders and PTSD being the most common (*45*).

The resources available for maternal, child and adolescent mental health services are deficient throughout the Region. Only eight of the 22 countries in the Region reported having a clearly articulated, specific child and adolescent mental health policy, while only three countries reported having a specific programme (*7*). The service gap for maternal, child and adolescent mental health services in the Region is probably no different from most of the other regions (20%–80%) although no data are available. The median treated prevalence rate is 0.07% for children and adolescents. Only 5% of mental health outpatient facilities are specifically providing care to children and adolescents. The median percentage of women treated in outpatient facilities is 45% and the percentage of children and adolescents treated in these facilities is 12%. Concerning day treatment facilities that specialize in treating children and adolescents, these are available only in one third of the reporting countries. The median percentage of women treated in day treatment facilities is 42%

Table 11. Child and adolescent mental health resources in the Eastern Mediterranean Region

Measure	Eastern Mediterranean Region				Global			
	Outpatient	Inpatient	Day care	Mental institutions	Outpatient	Inpatient	Day care	Mental institutions
Number of children and adolescents served by one facility	2.08 million	NA	1278	NA	1.05 million	NA	2.3 million	NA
Percentage of children and adolescents treated	12%	1%	6%	0.8%	12%	6%	5%	4%
Percentage of women users	45%	33%	42%	32%	46%	42%	47%	38%

Source: *(46)*

and the percentage of children and adolescents treated in these facilities is 6%. The proportion of women patients in community-based psychiatric inpatient units is about 33% and use of these facilities by children and adolescents is about 1%. The admission rate of women to mental hospitals is 32% while the percentage of children and adolescents treated in mental hospitals remains low at 0.8% (*46*) (Table 11).

The number of child psychiatrists ranges from 1 to 4 per million of the population in countries of the Region, with the exception of Tunisia. Few countries have an identified budget for child adolescent mental health (*7*).

Evidence from the Region indicates that using community-based health workers to deliver psychological intervention for perinatal depression resulted in decreased rates of depression in mothers and in their infants being less likely to have a diarrhoeal episode in the 2 weeks prior to the interview, more likely to have completed immunization, improved interaction between parents and infants and increased uptake of contraceptives (Table 12). Similarly, evidence from the Region indicates that school-based interventions, whether child-centred or environment-centred, can be effective in prevention of substance use disorders and promoting mental health outcomes, especially if they involve the parents and teachers as well (*11*,*34*).

However, evidence with regard to the effectiveness of interventions to prevent learning and developmental disabilities, ranging from food fortification, vaccination of mothers against rubella, vaccination of children for *Haemophilus influenzae* and measles, screening for Down syndrome and metabolic disorders, and the beneficial effects of exclusive breastfeeding and complementary feeding on the cognitive and intellectual development of children needs to be generated from the Region. There is little scientific evidence available from the Region with regard to the benefits of

Table 12. Effect of intervention for perinatal depression on maternal and infant health and growth

Maternal mental health measures	Base line		6 months		12 months	
	Control	Intervention	Control	Intervention	Control	Intervention
Depression score	14.4	14.8	8.7	4.5	10.7	5.4
Disability score	8.3	8.1	4.2	2.3	5.2	2.2
Functioning score	62	62	72	79	69	78
Perceived social support	44.5	46	43.7	50	42.5	51
Infant growth and health measures	**6 months**				**12 months**	
	Control	**Intervention**			**Control**	**Intervention**
Stunted	9%	9%			23%	18%
Underweight	12%	12%			65%	60%
Complete immunization					85%	94%
Diarrhoeal episodes					43%	32%
Exclusive breastfeeding	11%	17%				
Maternal contraception rates					53%	62%

Source: *(47)*

home and centre-based stimulation on early childhood development, or of preschool programmes and training of parents of children with intellectual disabilities and pervasive developmental disorders (including autism) to improve development, functioning and participation of the children within families and communities.

Action to improve the maternal, child and adolescent mental health of populations, besides its intrinsic value, will also have positive impact on the achievement of a number of Millennium Development Goals. Such impact would in include reduction in maternal, infant and child mortality through improved treatment of antenatal and postnatal depression, leading to decreased numbers of suicides, improved infant and child care and better uptake of general preventive and promotive interventions; reduction in HIV infection rates for the 17–24 year-old age group through reductions in unsafe sex and levels of drug usage and addiction as well as better adherence to antiretroviral therapy; and reduction in rates of absolute poverty which has a recursive association with mental health (*48*).

It is estimated that to provide a basic core package of mental health services that covers the majority of the population, the annual per capita expenditure on mental health should increase by US$ 2 in low-income and by US$ 4 in middle-income countries Given the extremely low baseline expenditure on mental health services this would necessarily involve a large increase in expenditure. If carried out in a stepped manner this would be affordable for most of countries, especially if integrated into the existing health services and linked to other health problems perceived to have a higher priority. Maternal, child and adolescent mental health interventions lend themselves well to such an approach (*18*, *34*).

While small-scale initiatives exist in some countries with regard to maternal, child and adolescent health, a comprehensive strategy at regional and national level would address the issues in a holistic manner. Such a strategy can be addressed within the broader strategic framework of the social services and health systems addressing maternal, child and adolescent health side by side and developing specialized set of services for maternal, child and adolescent mental health. The WHO Eastern Mediterranean Region, with its wide variations in the economic and demographic profiles of its countries, provides great opportunity to health and social service planners for innovation in this regard. Attempting to develop a fixed model that is applicable to every country will encounter many difficulties. However, the basic principles of the strategy, such as raising awareness, research and training of health professionals, remain the same for all countries irrespective of their social, economic and political status.

3. Challenges

In 1997 all the Member States of the Region issued a joint statement at the Forty-fourth session of the Regional Committee pledging to support mental health policies and programmes, coordinate with other social sectors, raise awareness, and encourage and work with nongovernmental organizations to foster mental wellbeing. In the intervening period a significant proportion of the countries have developed specific mental health policies, and an increasing proportion are developing or reviewing mental health legislations. However, the mechanisms, structures and resources needed to implement the policies and legislation are not available. The main reason for this is that mental health issues in general, and maternal, child and adolescent mental health issues in particular, are still not accorded the political visibility and commitment needed. This, in turn, contributes to the continued lack of integration of the mental health component in national health and social policies.

Stigma and discrimination operative at individual, community and institutional levels continue to be a major challenge in mainstreaming mental health in general, and maternal, child and adolescent mental health in particular, into the health and social sectors. This challenge needs a multisectoral collaborative and sustained response to bring about a change in the knowledge, stigmatizing attitudes and discriminatory practices experienced by individuals and families suffering from mental disorders. Similarly, the fact that preventive and promotive interventions are, for the most part, outside the scope of the traditional health sector necessitates the building of partnerships across disciplines and sectors. The paucity of evidence on the extent of the maternal, child and adolescent mental disorders and of effective interventions to prevent and manage these disorders is another challenge. Mapping of the resources available for maternal, child and adolescent mental health in countries is needed.

At the service delivery level, integration of the mental health component into primary health care at a national level is making slow progress in the Region; maternal, child and adolescent mental health problems are not being addressed in the general health services. The main challenge to integration of the mental health component in these services involves building up the capacities of the system and the human resources to deliver the maternal, child and adolescent mental health services. Another major challenge is the need to improve the availability of specialized mental health professionals. This would involve not only a quantitative increase but also a qualitative shift in the attitudes and practices of specialized personnel, from providing clinic-based care to providing the training, referral and supervisory support needed by primary health care, nutrition, integrated management of child health (IMCI) and maternal and child health services.

4. Strategic directions

4.1 Objectives

1. Promote planning and implementation of national policies, strategies and programmes for maternal, child and adolescent mental health.
2. Facilitate the development of maternal, child and adolescent mental health services delivered through the existing health and social services.
3. Promote coordinated intersectoral action for positive mental health and prevention of mental and substance use disorders.
4. Facilitate the strengthening of health systems and promote monitoring, evaluation and research.

4.2 Target audience

These strategic directions are aimed at the entire spectrum of stakeholders:

- policy makers and public health professionals in the public ,private and nongovernmental sectors involved in developing and implementing policies, plans and programmes at the regional, national and subnational level.
- international, regional and national organizations involved in development and provision of services, advocacy and public education, such as civil society organizations, consumer and family associations, United Nations agencies and nongovernmental organizations.
- international, regional and national mental health professionals and associations.

4.3 Operative period

The strategy will be operative during the six-year period from 2010 to 2015. Within the WHO programme structure, this covers the Eleventh General Programme of Work (the biennia 2010–2011, 2012–2013 and 2014–2015).This aligns also with the operative period of the mental health GAP action programme of WHO which has identified child and adolescent mental disorders as a priority for development of intervention packages and the Millennium Development Goals reporting period.

4.4 Strategic directions and actions

The principal strategic directions suggested are

- enhanced visibility and political commitment
- promotion of mental health literacy to combat stigma and discrimination
- assessment of disease burden and mapping of available resources
- development of human resources
- integrated service delivery
- prevention of disorders and promotion of mental health
- strengthening research, monitoring and evaluation

Strategic direction 1: Enhancing the visibility of and strengthening the political commitment to maternal, child and adolescent mental health issues

An enabling environment in which to site the maternal, child and adolescent mental health initiatives is essential. This requires robust political commitment on a consistent, long-term basis. The clearest expression of political commitment at the highest level is a national policy. Its implementation requires besides political commitment and allocation of commensurate resources.

Development of national policies and legislation should draw on the cultural strengths of the Region, such as strong family bonds and a tradition of caring for the weak on the one hand, and grounded in a robust evidence base on the other. It must be recognized that provision of maternal, child and adolescent mental health care should not be the sole responsibility of the Ministry of Health. Other ministries, such as education, social welfare, finance, justice and communication, as well as civil society organizations, private sector, international and national nongovernmental orgnaizations, United Nations organizations, and religious organizations, are also important stakeholders.

A multidisciplinary body responsible for coordinating, planning, implementation, monitoring and evaluation of activities for mainstreaming/integration of the maternal, child and adolescent mental health component at all levels of care in the health system needs to be set up in the Ministry of Health. It should have representation from all the stakeholders identified and have with a specific budget to discharge its mandate. This body can also be replicated at subnational levels.

This body should, as a first step, review the existing health and social sector policies and legislation to ensure that maternal, child and adolescent mental health components are reflected as priority areas in these policies. The subsequent modification/formulation of policies should extend to overcoming the existing barriers that hinder effective implementation of these policies, for example

inequitable allocation of resources, negative stereotypes in the media and nonobservance of the human rights of persons with mental illness. This should involve the range of stakeholders to promote ownership and active implementation of the provisions.

Priority areas for action	Indicator (s)	Time-frame	Responsible agencies
Review/update national health and social sector policies dealing with maternal, child and adolescent mental health	• Review of national health and social sector policies conducted using the WHO checklist in 5 countries • Key stakeholders, including women and adolescents involved/consulted in the review process and formulation of suggested modifications • Specified resources allocated at national and subnational levels to ensure implementation	2010–2013	• Ministries of health, education, social welfare, women's development, finance and planning • Civil society organizations • Professional organizations/ associations • WHO • Other United Nations organizations
Review/ update national legislation impacting on maternal, child and adolescent mental health	• Review of national legislation conducted using the WHO checklist in 5 countries • Key stakeholders, including women and adolescents involved/consulted in the review process and formulation of suggested modifications • Specified resources allocated at national and subnational levels to ensure implementation	2010–2013	• Ministries of health, education, social welfare, women's development, finance and planning • Civil society organizations • Professional organizations/ associations • WHO • Other United Nations organizations
Create a multidisciplinary body within the Ministry of Health to coordinate, plan, implement, monitor and evaluate activities for mainstreaming/integration of maternal, child and adolescent mental health components at all levels of care in the health system	• National and subnational multisectoral/disciplinary coordinating body(ies) set up in the Ministry of Health and departments of health of 8countries • Specified budget provided for the coordinating body to discharge its mandate in the 8 countries • Technical subcommittees established for the areas of prevention, promotion, service provision, capacity-building, evidence generation, monitoring and evaluation in 8 countries under the umbrella of the national body in the Ministry of Health • Country specific strategies/plans for maternal, child and adolescent mental health care developed in 5 countries	2010–2013	• Ministries of health

Suggested actions

- Establish a national multidisciplinary and multisectoral body within the Ministry of Health with the mandate to coordinate, plan, implement, monitor and evaluate activities in the area of maternal, child and adolescent mental health. It should be supported by specified resource allocations but also be able to mobilize resources on its own.

- Establish technical subcommittees for the areas of prevention, promotion, service provision, capacity-building, evidence generation, monitoring and evaluation. These subcommittees should be responsible for developing, implementing, monitoring and evaluating the specific components of the national plan under the umbrella of the national body.
- Review the existing health and social sector policies, strategies, plans and legislation to ensure that there are specific provisions for maternal, child and adolescent mental health across the national and sub-national regulatory instruments.

Countries which have been identified for intensified support during the WHO mhGAP action programme (Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, , Jordan, Pakistan, Sudan, Yemen) may be prioritized, followed by the rest of the countries. A framework for a model national mental health policy, including the components of child and adolescent mental health for countries with different capacities and resources for care, has been developed by WHO. This should be modified and adapted by each country, taking cultural, social and economic realities into consideration.

Strategic direction 2: Promoting measures to enhance health literacy in order to reduce the stigma and discrimination associated with mental health in general, and maternal, child and adolescent mental health in particular

The media plays a significant role in shaping perceptions of and attitudes towards mental health and mental health problems, including substance abuse. This is of particular relevance to adolescence. Appropriate involvement and positive utilization of the media can promote mental health literacy to combat the stigmatization of mental illnesses and discrimination against the people with mental illnesses. The media can also help change the negative stereotypes of the public towards mental disorders and promote timely access to mental health services and facilities. In addition, the media aninfluences the community's attitude towards mental health and can help in reviewing the impact of the interventions. However, the role of media needs to be supplemented through grassroots action by the involvement of civil society, user/family associations and national and international advocacy groups.

Suggested actions

- Design and implement advocacy and health literacy campaigns aimed at the general public as well as at specific sections of the community through involvement of mass media, civil society organizations, family and users' associations, international advocacy groups, national and international mental health professional associations. The aim should be to enhance knowledge and change attitudes about mental health in general, and maternal, child and adolescent mental health in particular, in order to reduce the stigma and

discrimination prevalent in the community. This would help to improve access to available services and determine the change in pathways to care used by the community.

- Support the above campaigns with legislative and regulatory measures to protect the rights of individuals suffering from mental disorders, especially mothers, children and adolescents.

Priority areas for action	Indicator(s)	Time-frame	Responsible agencies
Design and implement advocacy and health literacy campaigns	• Mental health literacy campaigns launched and sustained in 8 countries	2010–2015	• Ministries of health • WHO • Civil society organizations • User/family associations • WHO collaborating centres • Professional organizations/associations • Other United Nations organizations • Media organizations/platforms
Set up/strengthen mental health consumer and family associations, especially in the area of maternal, child and adolescent mental health	• Review of the existing family and consumer associations active in the Region conducted in 10 countries • Guidance and support to strengthen and expand the reach of family and consumer organizations provided in 10 countries	2010–2011 2012–2015	• WHO • Other United Nations organizations • Professional organizations and associations • Media organizations/platforms

Strategic direction 3: Assessing the burden of maternal, child and adolescent mental disorders, and mapping available resources and capacities for maternal, child and adolescent mental health services

Development and delivery of mental health care for mothers, children and adolescents needs to take into account the capacity of health systems, available financial, human and material resources and the community context to ensure maximum impact, equity and quality. Assessment of the extent of the problem and mapping of the available resources are essential prerequisites for each country to identify the priority conditions, system capacity, service gaps and actions needed to enhance the capacity of the system and plug the service gaps. The situation review in section 2 shows that only two countries (see Table 2) from the Region participated in the world mental health survey focusing on psychiatric morbidity in the adult population while for children and adolescents there is a complete lack of epidemiological evidence to give a realistic estimate of the extent of the problem.

In 2005 WHO conducted the ATLAS survey on child and adolescent mental health resources. However, only countries from the Region, accounting for only 38.5% of the population of the Region, participated in that exercise. The Regional Office is finalizing the instrument, based on the earlier ATLAS survey questionnaire, in order to assist the countries in assessing the resources currently available for maternal,

child and adolescent mental health and guide the process of technical support to countries based on their specific situations.

Suggested actions

- Assess the magnitude of the problem and identify the most common mental disorders experienced by children, adolescents and mothers and the pathways to care taken.
- Map the existing resources and capacities for maternal, child and adolescent mental health. This would include mapping of financial, human, infrastructural, logistic and information resources and capacities, as well as distribution and accessibility of available resources.

Priority areas for action	Indicator (s)	Time-frame	Responsible agencies
Map available resources for maternal, child and adolescent mental health	• Instrument developed for assessment of available resources for maternal child and adolescent mental health in countries • Assessment completed for 8 countries using the instrument developed by WHO	2010–2011 2012–2013	• WHO • WHO • Ministries of health
Conduct epidemiological studies to ascertain the burden of maternal, child and adolescent mental disorders	• National child and adolescent mental health surveys conducted in 3 countries using valid instruments.	2011–2013	• WHO collaborating centres • Professional associations • WHO • Ministries of health

Strategic direction 4: Developing care packages and human resources for maternal, child and adolescent mental health

a) Development of care packages

In order to mainstream/integrate maternal, child and adolescent mental health into existing health services, it is important to define the components of the care package for each level of care. This includes the disorders to be prioritized, the interventions to be delivered and the personnel executing the package at different health care levels. Development of guidelines and practice parameters should include algorithms for how to approach the patient with specific problems, methods of care including indication for hospitalization, use of medications, referral guidelines, etc.

Suggested actions

- Define a mental health care package for mothers, children and adolescents which can be delivered through the existing services at the different levels of the health system. The priority mental disorders for children and adolescents, identified as part of the MhGAP package, including mental retardation/learning disability, attention deficit hyperactivity disorder, conduct disorders, depression, anxiety

disorders and substance abuse, may be included, together with common perinatal disorders, especially post-partum depression.

- Develop training guidelines and practice parameters for health professionals responsible for provision of mental health care to mothers, children and adolescents at all levels of the health care system, based on the priority conditions identified for intervention.

Priority areas for action	Indicator(s)	Time-frame	Responsible agencies
Develop packages of care, guidelines and practice parameters for maternal, child and adolescent mental health	• Development of regional guide for monitoring child development with the three components of monitoring, supporting and managing child development, for use by health professionals/workers • Development of guidelines for recognition and management of ADHD, conduct disorders, substance abuse, and childhood and adolescent depression • Development of guidelines for recognition and management of perinatal depression for use by health professionals/workers • Publication of the above guidelines in manuals for training of health professionals/workers	2010–2011 biennium 2010–2011	• WHO • Other United Nations organizations • Professional organizations/associations • WHO • Other United Nations organizations • Professional organizations/associations
Translation and adaptation of the regional guidelines and manuals	• Adaptation of the regional guidelines and manuals by 3 countries • Scaling up of the process of translation/adaptation in 8 countries	2012–2013 biennium 2014–2015	• WHO • Other United Nations organizations • Ministries of health • Professional organizations/associations

b) Development of human resources

Training of health professionals in providing good quality health care at all levels of care (primary, secondary, tertiary), at the pre-qualification stage (in medical school, nursing school, etc.) and in-service (primary care physicians, community health workers, etc.) and at the postgraduate stages is essential for realization of the objectives above. Recognizing the importance of relevant training for future health workers, the Regional Office can collaborate with international and national associations of mental health professionals, other United Nations agencies and national authorities responsible for accreditation of education of medical and allied professionals and professional development of primary health care personnel. The aim should be to put mental health in general, and maternal, child and adolescent mental health in particular, into the mainstream of the curricula of medical and allied professional cadres, and as part of the continued professional development of health professionals/personnel. The training inputs need to be developed at regional and national levels, taking into account cultural and social diversity.

Suggested actions

- Conduct short-term intensive trainings for existing cadres of health professions master trainers at all levels in order to develop a critical mass of trainers for training personnel in the field of maternal, child and adolescent mental health.
- Conduct in-service training of health professionals responsible for maternal, child and adolescent health care provision at all levels of the health system.
- Strengthen pre-qualification training through inclusion of the maternal, child and adolescent mental health component in the curricula of health professionals.
- Develop postgraduate courses in maternal, child and adolescent mental health, producing specialists for tertiary care settings.
- Strengthen the maternal, child and adolescent mental health component in continuing medical education of health professionals.
- Provide technical assistance to medical schools to develop and/or strengthen collaborative centres in training and research in maternal, child and adolescent mental health care.
- Sensitize teachers in medical, paramedical and nursing schools to mental health issues in general, and maternal, child and adolescent mental health issues in particular.
- Provide technical support to the regulatory bodies in countries to modify the undergraduate curricula.
- Provide technical aupport to medical and nursing institutions responsible for postgraduate medical education to develop postgraduate courses in maternal, child and adolescent mental health producing specialists for tertiary care settings.

Priority areas for action	Indicator(s)	Time-frame	Responsible agencies
Conduct in-service training of primary health care physicians and personnel	• Initiation of in-service training of primary health care physicians /personnel based on the training modules developed and adapted in 3 countries of the Region • Scaling up of in-service training of primary health care physicians /personnel based on the training modules developed and adapted in 8 countries of the Region•	2012–2013 biennium 2014–2015	• WHO • Other United Nations organizations • Ministries of health • Professional organizations/associations
Conduct in-service training of IMCI, nutrition and maternal and child health personnel	• Initiation of in service training of maternal and child health personnel based on the training modules developed and adapted in 3 countries of the Region • Scaling up of in-service training of IMCI, nutrition and maternal and child health personnel based on the training modules developed and adapted in 8 countries of the Region	2012–2013 biennium 2014–2015	• WHO • Other United Nations organizations • Ministries of health • Professional organizations/associations

Priority areas for action	Indicator(s)	Time-frame	Responsible agencies
Conduct in-service training of secondary level professionals, paediatricians, reproductive health professionals and general psychiatrists and nurses	• Initiation of in-service training of secondary level professionals responsible for maternal, child and adolescent health care and general psychiatric services based on the training modules developed and adapted in 3 countries of the Region• Initiation of in-service training of secondary level professionals responsible for maternal, child and adolescent health care and general psychiatric services based on the training modules developed and adapted in 8 countries of the Region	2010–2013 2012–2015	• WHO • Other United Nations organizations • Ministries of health • Professional organizations/associations • WHO • Other United Nations organizations • Ministries of health • Professional organizations/associations
Development of postgraduate training facilities for maternal, child and adolescent mental health for general psychiatrists and allied health professionals	• Setting up of postgraduate training programmes in 8 countries	2012–2015	• WHO • Other United Nations organizations • Ministries of health • Professional organizations/associations • WHO collaborating centres

Strategic direction 5: Integrating the maternal, child and adolescent mental health component into the health care system at all levels

In order to ensure mainstreaming/integration of maternal, child and adolescent mental health into existing health services and programmes, a number of supportive structures and measures need to be put in place to enhance the capacity of the health systems.

Suggested actions

- Develop tools for assessment and management of priority maternal, child and adolescent mental disorders at all levels of the health care system.
- Ensure registration and sustained availability of essential psychotropic medicines for the priority child and adolescent mental disorders at all levels of care, in accordance with the guidelines developed earlier.
- Develop referral guidelines and channels between primary, secondary and specialized levels.
- Develop the minimal data set needed at episode, case, facility and system level and indicators for maternal, child and adolescent mental health, to be reported on as part of the health information system in the country.
- Strengthen secondary and specialist level mental health care facilities to provide referral, supervision and training support to downstream services.

Priority areas for action	Indicator(s)	Time-frame	Responsible agencies
Develop tools for assessment and management of common maternal, child and adolescent mental disorders	• Tools for assessment and management of common maternal, child and adolescent mental disorders are available in 3 countries • Primary health care, IMCI and maternal and child health, and nutrition personnel are trained on use of the tools in 3 countries • Training expanded to 8 countries	2010–2011 2011–2012 2013–2014	• WHO • Ministries of health • Professional organizations/associations
Provide essential psychotropic medicines	• Essential psychotropic medicines for management of child and adolescent mental disorders are available at all levels of care in 8 countries	2010–2015	• Ministries of health
Routinely collect and report on maternal, child and adolescent mental health indicators as part of the health information system	• Minimal data set for collection by levels of care identified in 8 countries • Indicators identified for reporting as part of the routine health information system reporting in 8 countries	2010–2015	• WHO • Ministries of health • Professional organizations/associations

Strategic direction 6: Developing services for promotion of maternal, child and adolescent mental health and prevention of mental disorders

Intersectoral collaboration is particularly important in the area of prevention of mental health problems and promotion of optimal mental health, especially of mothers, children and adolescents. Most of the interventions which have been shown to be effective in these areas, whether through mitigation of risk factors or enhancement of protective factors, are either out of the scope of traditional health sector action or are in the shared space with other social sectors and agencies. These interventions include improving nutrition, strengthening community networks, improving access to education and preschool education, parenting interventions and life skills education/trainings, delivered through the formal and informal education and community-based networks.

Suggested actions

- Establish prenatal and postnatal screening for learning disabilities (prenatal screening services for Down syndrome and postnatal screening services for metabolic disorders causing learning disabilities) as part of the maternal and child health care services.
- Establish early child care and development (ECCD) intervention programmes, such as early child education and socialization, preschool education and parenting skills training programmes, through the involvement of community organizations, community health workers, educational and/or health sectors, and adapt already available packages, such as the Care for Child Development Package developed by WHO and UNICEF.

- Promote early recognition and management of perinatal depression through training and support of the community organizations and community health workers, and adapt existing packages, such as the Thinking Healthy programme.
- Integrate life skills education and mental health components in school curricula to promote positive mental health and primary prevention of mental, neurological and substance use disorders.
- Establish linkages between education and health services to enable early recognition and management of mental, neurological and substance use disorders.
- Promote and strengthen mental health consumer and family associations to combat stigma and enhance social support within communities for the vulnerable.

Priority areas for action	Indicator(s)	Time-frame	Responsible agencies
Set up prenatal and postnatal screening for learning disabilities	• Setting up of a national prenatal screening services for Down syndrome and postnatal screening services for metabolic disorders causing learning disabilities as part of the maternal and child health services in 8 middle and high-income countries	2010–2015	• Ministries of health
Set up ECCD intervention programmes	• Review of existing ECCD programmes in all countries • Setting up of pilot ECCD programmes in 3countries • Evaluation and scaling up of ECCD programmes in 3 countries	2010–2011 2011–2012 2012–2015	• WHO • Ministries of health • WHO collaborating centres • Professional organizations/associations • Other United Nations organizations • Ministries of education and social welfare
Integrate the life skills education component in the health-promoting school network	• Development and publication of the life skills education package • Pilot testing of the package in selected schools of 3 countries• Evaluation and scaling up in health-promoting schools in 5 countries • Scaling-up in the health-promoting school network in 8 countries.	2010–2011 2011–2012 2013–2014 2014–2015	• WHO • Ministries of health • Ministries of education • Professional organizations/associations • Other United Nations organizations
Integrate the mental health component in the health-promoting school network	• Development and publication of guidelines for early recognition and management of childhood and adolescent disorders by staff working in the educational system • Pilot testing of the package in selected schools of 3 countries • Scaling up in health-promoting schools in 5 countries	2010–2011 2012–2013 2014–2015	• WHO • Ministries of health • Ministries of education • Professional organizations/associations • Other United Nations organizations
Set up early recognition and management of perinatal depression	• Development/adaptation of training package for community health workers caregivers and family associations to recognize and manage perinatal depression in 3 countries • Training on the developed modules initiated in 3 countries • Scaling up of training in 8 countries	2010–2011 2011–2012 2013–2014	• WHO • Other United Nations organizations • Professional organizations and associations • Ministries of health

Strategic direction 7: Supporting operational research and monitoring and evaluation of implementation of maternal, child and adolescent mental health programmes

Increasingly there are calls for evidence to support the policies and strategies. Countries in the Region are at different levels of development and consequently have different needs and capacities to undertake research, evaluation and monitoring activities. As highlighted in the section on situation analysis there is little evidence available from the Region on public health issues pertaining to maternal, child and adolescent mental health. In a recent publication regarding setting of research priorities in mental health, the following maternal, child and adolescent mental health issues were identified among the top ten priority areas for mental health research *(49)*.

- What training, support and supervision will enable existing maternal and child health workers to recognize, and provide basic treatment for, common maternal, child and adolescent mental disorders?
- What are the effectiveness and cost-effectiveness of school-based interventions, including for children with special needs?
- What is needed to estimate the effects of integrating management of child and adolescent mental disorders with management of other child and adolescent physical diseases including those caused by malnutrition.
- What is needed to develop feasible, effective and cost-effective ways of integrating parenting interventions and social skills in early childhood care?
- How effective are new, culturally appropriate community-level interventions (e.g. family therapy) for child and adolescent mental disorders (including mental retardation and epilepsy)?

Suggested actions

- Identify regional and national research priorities in the field of maternal, child and adolescent mental health.
- Develop capacity to conduct and disseminate research on issues of public health importance in the field of maternal, child and adolescent mental health.
- Develop linkages between research/academic institutions including WHO collaborating centres, and public health policy-making institutions, to ensure translation of research into action.
- Support networking of institutions and organizations working in research on mental health of mothers, children and adolescents.
- Develop a framework for evaluation and monitoring of implementation of maternal, child and adolescent mental health programmes.

Priority areas for action	Indicator (s)	Time-frame	Responsible agencies
Conduct epidemiological studies to assess the extent of maternal, child and adolescent mental disorders	• Review of available validated instruments to ascertain the epidemiology of maternal, child and adolescent mental disorders conducted	2010–2015	• WHO • Ministries of health • WHO collaborating centres • Professional organizations/associations • Other United Nations organizations
Develop priorities for applied research in maternal**,** child and adolescent mental health	• Regional priorities for research in maternal, child and adolescent mental health identified • National priorities for research in maternal, child and adolescent mental health identified • Number of applied research studies conducted/published in indexed journals according to identified priorities in maternal child and adolescent mental health	2010–2011 2011–2012 2012–2015	• WHO • Ministries of health • WHO collaborating centres • Professional organizations/associations • Other United Nations organizations
Develop evaluation and monitoring framework for the regional maternal, child and mental health strategy	• Monitoring and evaluation framework for regional strategy developed • Development of frameworks by 8 countries to monitor and evaluate the implementation status of regional strategy at country level and publication of life skills education packages	2010–2011 2011–2012	• WHO • Ministries of health • Professional organizations/associations • Other United Nations organizations
Build capacity for improving research skills in the Region tapping on existing centres of excellence as potential hubs for training	• Review conducted of existing research in the area to identify professionals active in research • Number of training programmes on research skills conducted by regional centres • Number of institutions in the Region providing research skills building programmes • Number of national and regional research publications in maternal, child and adolescent mental health	2010–2015	• WHO • Ministries of health • Professional organizations/associations • Other United Nations organizations
Create a network of regional institution and organizations working in research on mental health of children, adolescents and mothers	• Protocols, agreements have been signed and coordination has been established • Regional professional associations established/strengthened	2010–2015	• WHO • Ministries of health • Professional organizations/associations • Other United Nations organizations

5. Conclusions

1. Mental health problems of women during pregnancy and postpartum period in countries of the Region are under-recognized public health problems and make a substantial contribution to maternal and infant mortality and morbidity. 10%–50% of pregnant and postpartum women experience significant mental health problems, the most common being depression and anxiety. Suicide is a significant contributor to maternal mortality
2. Perinatal mental health problems effect physical, emotional, intellectual and cognitive development of children in the short and long term.
3. Perinatal mental health problems effect the ability of women to care for themselves and their children possibly reducing child survival.
4. There are simple and effective tools and approaches for early recognition and management of perinatal mental health problems in general health care settings.
5. Effective interventions for prevention of mental and substance use disorders in children and adolescents are available which can be delivered in community, health care and school settings.
6. Attention to maternal, child and adolescent mental health is important in attainment of millennium development goals for improving maternal health, reducing child mortality, promoting gender equality, reduction in HIV infection rates , universal primary education and eradicating extreme poverty.

Maternal, child and adolescent mental health problems are among the leading causes of disease burden globally and in the Region. The direct, indirect and intangible costs of mental disorders are imposed not only on the individuals and families concerned but also on the society. These costs are disproportionately shared by the vulnerable section of the society, including children, adolescents and mothers. There are cost-effective interventions available to prevent and manage the common mental disorders, and these can help children to achieve their full growth potential, mothers to provide sensitive care and adolescents to progress to a productive adulthood. World Health Assembly resolution WHA55.10 calls on Member States to support WHO's global action programme for mental health and to strengthen action to protect children. Member States of the Eastern Mediterranean Region need to take urgent action to address this issue because a significant proportion of the population is under 19 years of age and because the rates of mental disorders during pregnancy and following delivery are almost double those seen in developed countries. The priority areas for action include integration of mental health services into the health care system at all levels, intersectoral action to prevent mental disorders and promote well-being, and promotion of research, evaluation and monitoring.

The strategic directions and actions suggested provide a foundation for development of national strategies and action plans for a comprehensive and integrated approach to reducing the burden of mental ill health on these vulnerable sections of the society. The Regional Office will provide technical support to facilitate the development of national action plans for maternal, child and adolescent mental health and their implementation. Specifically, the Regional Office will advocate for a higher level of political commitment and resource allocation to this neglected field, support campaigns to promote mental health literacy to counter stigma and discrimination, build up the capacity for service provision, research, monitoring and evaluation and promote collaboration and partnerships at regional level to mobilize resources.

6. Recommendations to Member States

1. Review and update national health policies, strategies and plans to ensure that maternal, child and adolescent mental health is specifically identified as a priority area with specified resources.
2. Develop specific national maternal, child and adolescent mental health strategies and plans in line with the regional strategic directions.
3. Establish a national multidisciplinary body in the Ministry of Health to coordinate, plan and monitor implementation of the provisions of the national maternal, child and adolescent mental health strategy and plan, with specific resource allocation.
4. Integrate delivery of maternal, child and adolescent mental health services within the existing health care system.
5. Prepare national training materials and clinical guidelines for maternal, child and adolescent mental health for integrated delivery of care in at all levels of the health care system.
6. Build up the human resources capacity for maternal, child and adolescent mental health in the health sector, as well as related social sectors.
7. Create multidisciplinary networks for promotion, prevention and evidence generation for maternal, child and adolescent mental health.

7. Implementation steps for the regional strategic directions

Implementation of the strategic directions for the Region requires proper planning, organization and prioritization by the Regional Office and countries. The following steps need to be considered:

- Follow-up by countries on adoption of the regional strategic directions by the WHO Regional Committee for the Eastern Mediterranean (see Annex 1);
- Advocacy for adequate budget allocation for the implementation of the regional strategic directions and actions by countries and the Regional Office for providing technical support to countries and monitoring the implementation of the regional strategic directions in the countries .
- Establishment of a regional forum for providing effective guidance and technical support in monitoring and implementing the regional strategic directions and for networking.

The Regional Office and countries need to prioritize the implementation of the following strategic actions:

- review and updating of national policies and strategies;
- setting up of multidisciplinary bodies in ministries of health to coordinate, plan, and monitor the implementation of the provisions of regional strategy;
- preparation of training materials and clinical guidelines for maternal, child and adolescent mental health for integrated delivery of care in maternal and child health and primary health care facilities;
- building up the human resources in the health sector as well as related social sectors
- organization of services for delivery of maternal, child and adolescent mental health services within the existing maternal and child health and primary health care systems and facilities;
- creation of multidisciplinary networks for promotion, prevention and evidence generation.

8. Expected results at regional and country levels by the end of the operational period (2010–2015)

The Regional Office, in cooperation and coordination with the Member States, aims to achieve the following measurable expected results.

- The regional strategic directions and actions for maternal, child and adolescent mental health in the Eastern Mediterranean Region will have been adopted.
- National strategies and action plans at country level will have been developed and/or updated in 8 countries.
- A database for an evidence-based decision-making process regarding the maternal, child and adolescent mental health services and resources will have been created and/or updated in 8 countries.
- Care packages and guidelines will have been developed in at least 3 countries.
- Training programmes in maternal, child and adolescent mental health for health professionals (physicians and nurses/paramedics) and related professionals (psychologists, speech therapists, etc.) will have been initiated in at least 3 countries.
- Mental health care of mothers, children and adolescents will have been mainstreamed /incorporated into primary health care and maternal and child health care and in the curriculum for the training of primary health care and community care workers in 3 countries.
- Regional and national networks among agencies, organizations, academic institutions and individuals concerned with and interested in the maternal, child and adolescent mental health will have been created in 8 countries.
- Inclusion of the mental health component in the teacher training curricula and life skills education in schools will have been initiated in 3 countries.
- A systematic awareness campaign regarding the maternal, child and adolescent mental health issues will be initiated, at least on an annual basis, in 8 countries.
- A database on research related to various areas of maternal, child and adolescent mental health will have been created in at least 5 countries.

For active follow-up and evaluation of the maternal, child and adolescent mental health programme in the Region, a set of minimum indicators should be used for making an assessment of its performance and impact:

- number of countries that have a documented national strategy and plan of action on maternal, child and adolescent mental health (target: 8);
- number of countries that have developed care packages and guidelines for different levels of health care (target 3 countries);
- number of countries in which primary health care and mother and child health units/centres (or percentage) offer health care services for mothers, children and adolescent mental health (target 3 countries): proportion within countries will vary;
- number of countries with programmes developed for specialization in child and adolescent psychiatry in the country (target: 3 countries);
- number of countries with programmes developed for specialization in child psychology and speech therapy (target 3 countries);
- number of countries which have initiated life skills education programmes at national/sub national level (target 3 countries);
- number of primary health care personnel trained each year in providing maternal child and adolescent mental health care (target: 1.25%–5% of the primary care personnel in 3 countries);
- number of countries with national/subnational networks/organizations providing maternal child and adolescent mental health care (target: 10 countries);
- number of countries that organize awareness campaigns and training opportunities regarding the health of mothers, children and adolescents. (target: 8 countries);
- number of countries that have a database on research related to the maternal, child and adolescent mental health (target: 5 countries).

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Annex 1.

REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN **EM/RC57/R.3**
October 2010

Fifty-seventh Session

Maternal, child and adolescent mental health: challenges and strategic directions 2010–2015

The Regional Committee,

Having reviewed the technical paper on maternal, child and adolescent mental health: challenges and strategic directions 2010–2015[1];

Recalling resolutions WHA55.10 Mental health: responding to the call for action, EM/RC52/R.5 Substance use and dependence, and EM/RC53/R.5 Public health problems of alcohol consumption in the Eastern Mediterranean Region;

Mindful of *The world health report 2001* on mental health and *The world health report 2002* on reducing risks which highlight the burden imposed by mental, neurological and substance use, not only as discrete disorders but also as independent risk factors for injuries, violence, communicable and noncommunicable diseases;

Recognizing that more than half of the population of the Region is under 19 years of age, complex emergencies prevail in one third of Member States and the Region is undergoing rapid sociocultural transformation which renders children, adolescents and mothers vulnerable to the development of mental health problems;

Concerned at the reports originating from some Member States showing a high burden of maternal, child and adolescent mental health problems and at the lack of large-scale epidemiological studies in most Member States on the extent, causes and major risk factors;

Concerned also at the fragmentation of, and lack of access to, mental health services for mothers, children and adolescents;

Noting the existence of cost-effective and evidence-based programmes to prevent and manage maternal, child and adolescent mental health problems;

[1] Document no. EM/RC57/3

Acknowledging the importance of investing in promotion of mental health and prevention of mental disorders among mothers, children and adolescents as important also for achieving the Millennium Development Goals;

Aware of the need to provide regional directions to guide national policies, strategies and plans for maternal, child and adolescent mental health;

1. **URGES** Member States to:

   1.1 Review and update, or develop as necessary, national mental health policies, legislation, strategies, and plans to ensure that the provisions of the regional strategic directions on maternal, child and adolescent mental health are reflected, and mobilize the necessary resources;

   1.2 Set up a multidisciplinary national body in the Ministry of Health or other relevant ministry to coordinate, plan and monitor implementation of the provisions of national policies, strategies and plans on maternal, child and adolescent mental health as part of the national mental health body;

   1.3 Integrate delivery of mental health services, especially for mothers, children and adolescents, within the existing health care system at all levels by building the capacities of relevant cadres of health professionals through pre-service and in-service training;

   1.4 Enhance mental health literacy through intersectoral collaboration in order to minimize stigma and discrimination faced by persons suffering from mental disorders;

2. **REQUESTS** the Regional Director to:

   2.1 Continue to provide technical support to Member States in the development, implementation and monitoring of the provisions of national policies, legislation, strategies and plans for mental health, especially maternal, child and adolescent mental health;

   2.2 Strengthen and expand partnership with relevant stakeholders in support of the regional strategic directions on maternal, child and adolescent mental health;

   2.3 Facilitate exchange of experience on successful programmes and foster the development of networks for promotion of maternal, child and adolescent mental health and prevention of mental disorders;

   2.4 Promote international cooperation in building capacity in Member States to undertake applied research in the area of maternal, child and adolescent mental health.

Maternal, child and adolescent mental disorders constitute a public health problem. The estimated prevalence of 15%–36% for maternal mental disorders and 10%–36% for child and adolescent mental disorders in the WHO Eastern Mediterranean Region is significantly higher than the estimates for developed countries. Mental disorders among mothers, children and adolescents are inextricably linked, at the causal as well as at the intervention level, making it imperative to address the issue in an integrated manner. *Maternal, child and adolescent mental health: challenges and strategic directions for the Eastern Mediterranean Region* provides an overview of the situation globally and regionally, identifies the major challenges and suggests strategic directions and actions to promote maternal, child and adolescent mental health in the Region. The strategic directions outlined were endorsed by the WHO Regional Committee for the Eastern Mediterranean in 2010. The publication is aimed at policy-makers, health system managers, mental health professionals and others interested in mental health in general, and maternal, child and adolescent mental health issues in particular. It will help countries in developing national strategies and action plans based on evidence and in charting progress in provision of integrated mental health services for maternal, child and adolescents. In turn, this will help in achievement of the Millennium Development Goals.