WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean
ORGANISATION MONDIALE DE LA SANTE
Bureau régional de la Méditerranée orientale

منظمة الصحة العالمية
المكتب الإقليمي لشرق المتوسط

Regional Committee for the Eastern Mediterranean

EM/RC57/3
August 2010

Fifty-seventh Session

Original: Arabic

Agenda item 4 (a)

Technical paper

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

Maternal, child and adolescent mental disorders constitute a public health problem. The estimated prevalences of 15%–36% for maternal mental disorders and 10%–36% for child and adolescent mental disorders in the Region are significantly higher than the estimates for developed countries. Maternal mental disorders are associated not only with adverse reproductive health outcomes but are also one of the modifiable risk factors for adverse child and adolescent development outcomes. The strategic directions and actions proposed 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 for these vulnerable sections of society.

A draft resolution is attached for consideration by the Regional Committee.

Contents

Executive summary

Maternal, child and adolescent mental disorders constitute a public health problem. The estimated prevalences of 15%–36% for maternal mental disorders and 10%–36% for child and adolescent mental disorders in the Region are significantly higher than the estimates for developed countries. Maternal mental disorders are associated not only with adverse reproductive health outcomes but are also one of the modifiable risk factors for adverse child and adolescent development outcomes. 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. The World Health Assembly resolution WHA55.10 calls on Member States to strengthen action to protect children from and in armed conflicts, a call echoed in the recommendations of the Commission on Social Determinants of Health to make available comprehensive packages for children, mothers and other caregivers for early child development. Member States need urgently to take necessary action to address this issue. The strategic directions and actions suggested in the paper 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 for these vulnerable sections of society. 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.

1. Introduction

Mental health is integral to the conceptualization of health as defined in the preamble of the WHO Constitution (*1*)**.** The World Health Report 2001 set out WHO's vision for the improvement of mental health systems to reduce the burden of mental disorders (*2*). The recommendations of the report were endorsed by the Executive Board and World Health Assembly in resolution WHA55.10 which called on Member States to provide support to WHO's global action programme for mental health and to strengthen action to protect children from and in armed conflict. In 2008, the Director-General launched the mental health Gap Action Programme (mhGAP). Eight countries from the Region have been identified for intensified support in the mhGAP (Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Jordan, Pakistan, Sudan and Yemen). The aim of mhGAP is to reduce the gap between the resources available and those needed for reduction of the burden caused by mental, neurological and substance use disorders. Among the priority conditions identified for action in MhGAP are child and adolescent mental disorders (*3*).

Mental, neurological and substance use disorders contribute 14.4% of the global burden of disease. In women aged 15–44 years, the age group most relevant for reproductive health, and children and adolescents aged 0–14 years, mental, neurological and substance use disorders account for 27.6% and 5.8%, respectively, of disability-adjusted life years (DALYs). However, psychiatric disorders of childhood and adolescence, such as attention deficit hyperactivity disorder (ADHD), conduct disorder, learning disorders, mood disorders, and pervasive development disorders, were not included in the calculations of the DALYs (*4,5*). According to the World Health Report 2001, 20% of children and adolescents worldwide suffer from disabling mental illness (*2*). Of these, 4%–6% are in need of clinical care. This translates into 5%–20% of the population in need of services but the estimated service gap is 20%–80% (*6*).The prevalence of mental disorders in women in the perinatal period (the period of pregnancy and up to one year after childbirth) is estimated to range between 10%–50%. The estimated prevalence of 15%–36% for maternal mental disorders and 10%–36% for child and adolescent mental disorders in the Region is either similar to or significantly higher than the global estimates. These are associated with increased risk of worse reproductive and child health outcomes, including the physical, emotional, psychological and intellectual development of children (*7*). However, effective interventions for prevention and management of maternal, child and adolescent mental disorders are available and can be delivered in an integrated fashion in community, school and health care settings (*7,8*). In light of the available evidence of cost-effective interventions, the WHO Commission on Social Determinants of Health recommended building on existing child survival and education programmes and extending interventions in early life to include social/emotional and language/cognitive development (*9*).

Action for improving the maternal, child and adolescent mental health of populations, beside its intrinsic value, can also impact on a number of Millennium Development Goals. These include: reduction in maternal, infant and child mortality through improved treatment of antenatal and post-natal depression, leading to decreased suicides, improved infant and child care and better uptake of preventive and promotive interventions; reduction in HIV infection rates for the 17–24 year-old age group through reductions in unsafe sex and in levels of drug usage and addiction, as well as better adherence to antiretroviral therapy regimens; and reduction in absolute poverty which has a recursive association with mental health (*10*).

This paper aims to raise awareness of the issue of maternal, child and adolescent mental health and advocate for adoption of strategic directions and actions at a regional level in order to guide

development of comprehensive integrated maternal, child and adolescent mental health care in Member States.

2. Situation review

2.1 Global situation

Studies conducted in developed countries estimate a 10%–15% prevalence of mental disorders in women during the perinatal period. The most frequent in condition diagnosed during the perinatal period is depression, followed by anxiety disorders. Furthermore, an estimated 10% of mothers commit suicide up to one year after giving birth, of whom an estimated two-thirds suffer from mental disorders. Perinatal mental disorders are also associated with increased risk of dyspareunia, dysmenorrhoea, obstetric complications, preterm labour and increased infant mortality (*7*).

Globally, an estimated 200 million children under 5 years of age fail to reach their potential for cognitive development due to a combination of deficient care by their primary care providers and lack of adequate nutrition and health care (*11*). Perinatal depression has been identified as one of the modifiable risk factors for physical, emotional, psychological and intellectual development of children, the effects of which can extend well into adulthood (*12*).

Among the more common disorders in children and adolescents the prevalence rates for intellectual disability/mental retardation are estimated to be 3–4 per 1000 population, attention deficit hyperactivity disorder 3%–11%, conduct disorders 2%–10%, epilepsy 5–8 per 1000 population, depression 1%–11% and substance use disorders 5%–10 % (*13,14*).

There are cost-effective preventive, treatment and rehabilitation interventions available which can be delivered through the existing health and social sector facilities (*8,15,16,17*). The resources available for maternal, child and adolescent mental health services are deficient throughout the world. Globally, only 3% of mental health outpatient facilities are providing care specifically to children and adolescents and the median treated prevalence rate for children and adolescents in mental health facilities is 0.16% (*18*). The number of child psychiatrists ranges from 1 to 4 per million of the population in countries outside the north American and European region. Only 25% of paediatricians were reported to have any mental health training despite being identified as front-line providers of such care in over 50% of the countries participating in the ATLAS project. Less than 10% of mental health care is provided in a primary health care setting and there is rarely any identifiable budget for child and adolescent mental health (*6*)

2.2 Regional situation

In the Eastern Mediterranean Region, neuropsychiatric disorders account for 12.4% of the total burden of disease (*4*). Epidemiological findings from countries suggest that prevalence rates for perinatal mental disorders are more than twice as high as in developed countries (15.8%–36%) (*19*). 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 the Islamic Republic of Iran. In all these studies the rates of common mental disorders were significantly higher in women (*19*). A series of studies from the Region has demonstrated that perinatal depression in mothers is associated with increased risk of under-nutrition, low birth weight, stunting, higher incidence of diarrhoeal episodes in the first year of life and failure to update the immunization status of the infants. Furthermore, postnatal depression persists for one year post partum in 56% of women as compared to 30% in developed countries. Postnatal depression has a dose-response relationship with poor growth outcomes for the infants and reduced uptake of child health promotion and

disease prevention interventions targeted at mothers. Evidence from developing countries in other regions demonstrates negative association between perinatal mental health problems in mothers with mental development quotient scores in infants at 6 months and poor performance in high-school entrance examinations in children aged 11–13 years (*20*).

There are no national level epidemiological studies regarding maternal, child and adolescent mental disorders in the Region. However a number of small-scale community-based studies carried out over the past 25 years are available. A multicountry study including Sudan showed an estimated prevalence of mental disorders in children and adolescent aged 5–15 years of 12%.The rates of mental disorders were estimated to be 10% and the rates of mental retardation were estimated to be 2%. The weighted prevalence of mental disorders among schoolchildren in the United Arab Emirates was estimated to be 10.4%, while a study in United Arab Emirates 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 a prevalence of emotional disorders to be 5.5%, while studies from Egypt estimate a prevalence of 4.5%–10.25% for emotional disorders. The rates of emotional disorders are higher in girls and rates of depression show a positive association with age (*19*). 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 past 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% (*21*). Studies on attention deficit hyperactivity disorder have estimated a prevalence of 0.46% to 14.85% while a recent review on the subject concludes that rates are similar to other cultures (*19,22***)**. Epilepsy affects an estimated 4.7 million people and the estimated prevalence is 9.4 per 1000 population (*23*). Furthermore, in many countries, the age of first use for many 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 students had considered suicide and 5.2 % had used drugs in the past 12 months, while 11.8% had used alcohol in the past 30 days (*24*). 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 (*19*).

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 and learning disability were among the most common disorders affecting children and adolescents. Estimated prevalence of PTSD varied from 14% to 30% among schoolchildren and adolescents (*25*). Studies carried out in Palestine reported case incidence of emotional and behavioural disorders of 54.4% in boys and 46.5% girls (*43*). The estimates of PTSD ranged from 17.3% to 40% among children and adolescents (*26*). A recent study from Afghanistan involving 11–16 year old schoolchildren estimated a prevalence of 22.2% probable psychiatric morbidity, with emotional, conduct disorders and PTSD being the most common (*27*).

The resources available for maternal, child and adolescent mental health 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 (*6*). Only 5% of the mental health outpatient facilities are specifically providing care to children and adolescents and the median treated prevalence rate for children and adolescents at these facilities is 0.07% (*28*).

3. Challenges and response

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 well-being. 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 legislation. 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 continuing 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 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 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, IMCI and maternal and child health services.

4. Strategic directions for the period 2010–2015

Development of a fixed model applicable in its entirety to every country in the Region would be difficult given the wide variation in the economic and demographic profiles of the countries. However, in light of the common nature of most of the challenges identified, it is possible to have consensus on the strategic directions at the regional level in order to provide the necessary direction to the full spectrum of stakeholders: policy-makers and public health professionals; 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; and international, regional and national mental health professionals and associations. A detailed document further elaborating on the strategic directions and actions outlined has been developed to support Member States in developing country-specific plans of action.

Objectives

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

In order to achieve the objectives the following interlinked and synergistic directions are proposed.

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

Strategic 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.

Sample indicators

- Number of countries that have established a national and subnational multisectoral/multidisciplinary coordinating body(ies) in the Ministry of Health (Baseline; 0 Target 10)
- Number of countries that have a documented national strategy and plan of action on maternal, child and adolescent mental health (Baseline; 3 Target 10)

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

Strategic 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.

Sample indicator(s)

- Number of countries that organize awareness campaigns and training opportunities regarding the mental health of mothers, children and adolescents. (Baseline 0; Target 8);

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

Strategic 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.

Sample indicator(s)

- Assessment completed for available resources using the instrument developed by WHO (Baseline 0; Target 8)

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

Strategic 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.
- 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.

Sample indicator(s)

- Number of countries which have developed care packages and guidelines for different levels of health care (Baseline 0; Target 5)
- Number (or percentage) of primary health care and mother and child health units/centres that offer health care services for mothers, children and adolescent mental health (Baseline 0; Target 5); proportion within countries will vary
- Number of countries with programmes developed for specialization in child and adolescent psychiatry in the country (Baseline 0; Target 5)
- Number of primary health care personnel trained each year in providing maternal child and adolescent mental health care (Target 1.25%–5% of primary care personnel in 5 countries)

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

Strategic actions

- Develop tools for assessment and management of priority maternal, child and adolescent mental disorders at all levels of the health care system.
- Ensuring 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.

Sample indicator(s)

- Number of countries in which tools for assessment and management of common maternal, child and adolescent mental disorders are available (Baseline 0; Target 5)
- Number of countries in which health care personnel are trained on use of the developed tools (Baseline 0; Target 5)
- Number of countries in which essential psychotropic medicines for management of child and adolescent mental disorders are available at all levels of care (Baseline 0; Target 5)

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

Strategic 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 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.

Sample indicator(s)

- Number of countries that have established 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 care services (Baseline 0; Target 5)
- Number of countries which have initiated life skills education programmes at national/subnational level as part of the school curricula (Baseline 0; Target 5)

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

Strategic 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.

Sample Indicator(s)

- Number of countries that have a database on research related to maternal, child and adolescent mental health (Baseline 0; Target: 8).
- Number of countries that have identified national priorities for research in maternal, child and adolescent mental health programmes (Baseline 0; Target: 8)

5. Conclusion

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.

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