

ORGANIZING AND DELIVERING SERVICES FOR CHILD AND ADOLESCENT MENTAL HEALTH

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Mental health is a critical determinant of health and quality of life across the life-span. According to the World Health Organization (WHO, 1948), health is defined as “a state of physical, mental and social well-being”. During childhood and adolescence, many factors can influence children’s and adolescents’ psychosocial well-being and their capacity to develop to their optimal potential, cope with the normal stress of life, and contribute to their communities. These factors can operate at the level of the individual, family, school or neighbourhood, and at a broader societal level. Among others, these factors include inadequacies in the nurturing and stimulating nature of their environment, parents’ mental health, exposure to violence, abuse or neglect, nutritional deficiencies and chronic medical illness (Kieling et al, 2011; Walker et al, 2007; 2011).

The more risks people experience early in life, the worse their developmental outcomes and the higher the probability of experiencing psychological distress or mental health disorders (Sameroff et al, 2003). On the contrary, the more opportunities they have in childhood and adolescence to experience and accumulate the positive effects of protective factors that outweigh negative risk factors, the more likely they are to sustain mental health and wellbeing in later life (Currie & Todd, 2003). According to international evidence, 10%-20% of children and adolescents experience a mental health problem in any given year (WHO, 2001). Yet, in most countries only a small minority of young people with mental health problems is able to access appropriate resources for recognition, support and care (Morris et al, 2011). Health services for children and adolescents who are at risk but who do not yet exhibit clinical symptoms are even more inadequate (Knitzer, 2000).

INTERVENTIONS FOR CHILD AND ADOLESCENT MENTAL HEALTH (CAMH)

Meeting the mental health needs of children and adolescents requires the setup of multi-layered care systems that include a range of promotive, preventive and curative services. Table J.5.1 provides an overview of effective interventions that can be implemented in countries with different levels of resources, including low- and middle-income countries (Kieling, 2011; [mhGAP Evidence Resource Centre](#)). These interventions are delivered in a variety of settings, such as schools, homes, communities, and health facilities, and target diverse populations.

Among the preventive interventions, some of them (the so-called universal interventions) target all children or adolescents in a particular locality or setting. School-based physical activity programs, life skills training and restricting access to means of self-harm are examples of universal interventions. Others (selective interventions) focus on children exposed to risk factors for mental health problems, for example in the case of school-based psychosocial group interventions. Indicated interventions target children and adolescents experiencing subclinical symptoms; early stimulation programs for children with developmental delays belong to this category. Broad psychosocial strategies for mental health promotion in schools and communities need to be coupled with targeted interventions addressing the specific needs of young people with mental disorders and their families.

Table J.5.1 Examples of interventions for the prevention and management of mental health problems in children and adolescents

Interventions for developmental disorders	
Prevention	<ul style="list-style-type: none"> • Maternal and child nutritional and micronutrient supplementation • Prenatal and perinatal care • Reduction of prenatal exposure to alcohol • Immunization programs, malaria prevention • Early stimulation programs.
Management	<ul style="list-style-type: none"> • Family psychoeducation and orientation about locally available educational, social and rehabilitative services (including community-based rehabilitation services) • Parenting skills training • Promotion of human rights of the child and the family • Provision of support to carers • Cognitive behavioral therapy targeting problem behaviors
Interventions for behavioral disorders	
Prevention	<ul style="list-style-type: none"> • School-based preventive interventions involving training of teachers • Brief behavioral parent training intervention (integrated into child health services)
Management	<ul style="list-style-type: none"> • Family psychoeducation • Parenting skills training • Cognitive behavioral therapy and social skills training • Support to carers and families (to handle social and familial problems and address carers' mental health needs) • Pharmacological treatment for ADHD (prescribed by specialists, for children older than 6 years of age).
Interventions for internalizing disorders	
Prevention	<ul style="list-style-type: none"> • School-based physical activity programs and life-skills training • School-based psychosocial group intervention for at-risk children
Management	<ul style="list-style-type: none"> • Family psychoeducation • Interpersonal psychotherapy • Cognitive behavioral therapy • Adjunct treatments (structured physical activity programs, relaxation training and problem solving treatment) • Pharmacological treatment when appropriate
Interventions for suicidal behavior	
Prevention	<ul style="list-style-type: none"> • Development of policies to reduce harmful use of alcohol and restrict access to means of self-harm (such as pesticides and firearms) • Assist and encourage the media to follow responsible reporting practices of suicide events
Interventions for psychosis	
Management	<ul style="list-style-type: none"> • Psychoeducation for the young person and carers • Pharmacological treatment • Psychosocial interventions such as family therapy, social skills training and rehabilitation

Sources: Kieling et al, 2011; [mhGAP Evidence Resource Centre](#)

Professionals at different levels of the health care system need to be engaged in order to ensure timely recognition and management of specific mental health needs and vulnerabilities. Besides mental health specialists, health staff working at primary health care level, teachers, social workers, families and other community resources play important roles. The delivery of a comprehensive package of child and adolescent mental health interventions (including services described in Table J.5.1) requires not only the right mix of trained personnel but also mechanisms for integration of mental health into general healthcare, mechanisms for collaboration and liaison within the health system and across sectors, guidelines and clinical protocols for management of mental disorders in children, quality monitoring programs, and adequate supply of medications (WHO, 2007).

The following sections describe guiding principles and required step-wise actions for planning child and adolescent mental health services. Possible care models for the organization of services, particularly at primary health care level, are also presented.

PRINCIPLES FOR THE ORGANIZATION OF CHILD AND ADOLESCENT MENTAL HEALTH SERVICES

The organization of services for child and adolescent mental health needs to take into consideration several strategic recommendations. Some are consistent with the principles underpinning the organization of mental health services for adults; others are based on specific considerations for this age group.

Child mental health specialists play an important role in sensitizing governments on child mental health needs. They may act as expert advisors and contribute to the planning and evaluation of mental health services. Furthermore, changes in the conceptualization of services have direct implications on child mental health specialists' role. A good understanding of the main guiding principles is therefore important for child psychiatrists and other professionals in the field.

Training of mental health staff, Asmara, Eritrea, 2009



The guiding principles listed below are based on strategic directions proposed by the WHO and on available international evidence from implementation research (WHO, 2005a; 2008a; WHO and World Organization of Family Doctors, 2008; Eaton et al, 2011).

- **Integrate mental health in general health services**

Physical and mental illness frequently coexist. Somatic complaints are common presentations for mental health problems in children and adolescents (Campo et al, 2004). In addition, children with chronic medical illnesses are more prone to develop emotional and behavioral problems. Mainstreaming mental health into general health services contributes to improved recognition of mental disorders and ensures that physical healthcare needs of children with mental disorders are not neglected.

- **Improve equity and access to care by provision of care as close to communities as possible**

Many people with mental disorders do not consider themselves to be in need of psychiatric care. Parents and adolescents may perceive psychiatric care as stigmatizing. Utilization of mental health care services often improves when services are provided as part of primary health care. Provision of mental health care at primary care and community levels has the potential to increase access to treatment and equity in access to care by making available services closer to user's homes and by reducing users' direct and indirect costs (e.g. travel expenses).

- **Promote a continuum of care**

Addressing the mental health needs of young people requires the coordinated action of health professionals employed at various levels of the health system. Even when mental health problems are recognized by primary care workers, consultation with or referral to specialists may be necessary for further assessment and management. Families of children with chronic mental disorders, for example, developmental disorders, often report inadequate coordination between pediatric and adult services. Procedures for coordination between community care and specialized services and with adult facilities improve the perceived quality of care.

- **Ensure inter-sectorial coordination**

Children with mental disorders and their families have complex needs requiring multi-sectorial responses. They need to have access to appropriate educational and occupational opportunities and social and rehabilitation services. New staff competences and structured mechanisms for inter-sectorial coordination and multidisciplinary team approaches are needed.

- **Adopt an ecological approach**

The psychosocial well-being of children is closely linked to the mental health of parents and the quality of the family and school environments. Many psychiatric disorders that have their onset during adolescence are connected with family problems and social difficulties, and are only understandable

when viewed against this psychosocial context. Management of mental health problems in young people requires assessing the needs and resources in the family and active engagement of carers and teachers in treatment plans.

- **Adopt a life-cycle approach**

Children have specific vulnerabilities as they grow up and acquire a set of skills to cope with the adverse circumstances that will occur along their path. Their mental health and well-being is influenced by early experiences and, even beyond that, by maternal exposure to nutritional deficiencies, hazardous agents and stressful circumstances during pregnancy ([Foresight Mental Capital and Well-being Project, 2008](#); Fisher et al, 2011). If untreated, mental disorders with onset during childhood and adolescence are likely to persist and lead to poor health, educational and occupational outcomes later in life. When planning services for children's mental health promotion and care it is important to consider the entire range of opportunities for addressing early determinants of child mental health, as for example by including maternal mental health assessment and treatment in antenatal and postnatal visits.

- **Adopt a human rights-based approach to care**

Children with mental disorders are often stigmatized and discriminated against and, because of that, may be denied opportunities for adequate healthcare and education. They have the right to access quality mental health services that are appropriate to their needs, culture and gender. Healthcare workers can play a key role by promoting behavior change in families, schools and communities, and informing young people and their carers about their rights.

- **Promote users' participation**

Adolescents and children have the right to be informed about their health problems and participate in decision-making about their treatment (whenever possible, according to their age and developmental level, see Chapter A.1). Carers and other available resources within the family, school and community need to be engaged and empowered to assume active roles in promoting the psychosocial well-being and functioning of young people.

- **Mainstream health promotion interventions in primary health care settings**

Interventions based on strategies for reducing risk and strengthening resilience have proved effective for the prevention of mental disorders and promotion of psychosocial wellbeing in young people. Because of the huge reach of primary care services, the delivery of health promotion by general practitioners can have a significant impact on youth mental health. This opportunity is often untapped. The need for a paradigm shift in the role of primary health care professionals to assume increased responsibility for health promotion has been repeatedly emphasized (WHO, 2008b). Besides the role of medical services, schools and families offer opportunities for sustainable health promotion interventions. Parenting skills training and life skills training are examples of health promotion interventions in the family and school setting respectively.

PRACTICAL IMPLICATIONS OF ADOPTING THESE GUIDING PRINCIPLES IN THE DELIVERY OF CAMH'S INTERVENTIONS

Organization of services

Figure J.5.1 shows the optimal mix of services pyramid, a framework developed by the WHO to provide guidance for the organization of mental health services. It also applies to CAMH services. The pyramid highlights the fact that tertiary and specialist services are very expensive and needed by only a small portion of the population, while informal, community-based and primary health care services can be provided at a relatively low cost and are more frequently needed.

Young people use a variety of primary care services, such as maternal and child health outpatient clinics, outreach services for vaccination and growth monitoring, outpatient services for HIV counseling and testing, and family-planning services. These are all potential entry points for providing mental health promotion and care to children and adolescents in need. Trained primary care providers can address specific concerns about psychosocial distress and clinical symptoms for mental disorders. In some cases they also ask and assess for the presence of specific symptoms as part of their routine work. As an example, child development monitoring and early detection of developmental difficulties can be part of routine child-well visits. In many countries child mental health services are provided by specialists in secondary and tertiary care settings only and increasing access to mental health care in primary care settings requires a shift in the organization of services and in the allocation of financial and human resources.

Community-based and informal care consists of services provided mainly by peers, parents, school staff and influential community members. They play a major role especially in terms of community sensitization on mental health needs, promotion of attitudinal changes and promotion of psychosocial well-being.



Figure J.5.1 The optimal mix of services pyramid (WHO, 2007)



Attendees and Faculty,
IACAPAP Study Group in
Abuja, Nigeria, 2010

Community-based health workers may also be engaged in the delivery of services relevant to child mental health and they can be considered an “extension” of the primary care services. Human resource policies have to consider the specific training needs and incentives for peers, parents, teachers, community leaders, and community health teams according to their respective roles.

Policies and procedures for coordination and collaboration between services

National policies need to define pathways for coordination between services within the health sector and across sectors (i.e., with schools, social services and other community services), including mechanisms for referral and referral back. Traditionally, the organization of primary health care has relied on referral of all mental disorder cases to specialists. In most countries, specialists are available at secondary or tertiary care levels only. Delivery of child mental health services at a primary health care level requires the establishment of structured mechanisms for collaboration and team working, allowing primary care staff opportunities for regular consultation and supervision with specialists in mental health and related disciplines (Bradley et al, 2003). In some cases, mental health specialists (e.g., psychiatric nurses, psychologists) are made available at primary health care level and patients are referred by general practitioners to primary health care-based mental health specialists, who assume responsibility for providing treatment. This model is called the *replacement model*.

In *collaborative models*, general practitioners retain the primary responsibility for care but professionals with complementary skills (traditionally mental health professionals) work as part of a package of care, liaising with both patient and health worker to increase the overall effectiveness of treatment. Collaborative approaches are based on a strong partnership between front line health workers and other professionals with diverse expertise and mandates who work together to meet the users’ needs. This implies task-shifting and task-sharing among a multidisciplinary team of professionals. Collaborative approaches increase the feasibility of assessment and management of mental disorders by busy health workers in community-based settings, while also promoting the provision of good

quality and comprehensive mental health care. Evidence suggests that training of general practitioners and establishing collaborative care models may lead to greater impact on the overall quality of care and promote a better and more equitable use of scarce specialized personnel.

Human resources policy

While human resources are the most valuable asset of mental health services, many countries face difficulties with availability of trained staff, especially in rural settings and community-based services. Careful planning of training, specification of the tasks to be performed and deployment of workers is critical. A reallocation of staff from institutions to community-based services and from urban to rural areas may be needed, together with the recruitment and training of a wider range of workers at primary health care level. Strategies to improve staff retention and motivation are equally important. They may include provision of ongoing education and support through team meetings, consultations and supportive supervision.

Capacity building

General health care staff need to be trained in order to acquire basic mental health competencies for the detection of common mental disorders, provision of basic treatment and psychoeducation, and referral to other community-based and specialist services when necessary. Training materials address concerns about human rights and promote attitudinal change to reduce stigmatization and discrimination towards children with mental disorders and their families. Capacity building materials ought to increase primary health workers' awareness of their role for the promotion of mental health. These new skills need to be updated and refreshed with regular supportive supervision and on-site consultation and training.

Specialists in child mental health (pediatricians, mental health nurses, psychiatrists, neurologists, child psychiatrists) require adequate skills to work

World Mental Health Day
2009, Jordan



collaboratively with general health workers and multidisciplinary teams and provide them with supervision and support. In addition, the curriculum for a range of non-health professionals (e.g., social workers, community-based workers) has to include a mental health component when relevant to their functions.

Monitoring quality of care

The definition of standards for and indicators of quality of care is key to assessing the effectiveness of organizational changes and capacity building efforts. Important parameters for the evaluation of quality of child mental health care include:

- Access and equity of access
- Acceptability to users and staff
- Users' and carers' satisfaction
- Utilization of primary care services by children with mental disorders
- Reduced number of cases requiring admission to in-patient services or tertiary level outpatient visits
- Reduced clinical symptoms and improved functioning in daily life.

IMPROVING SERVICES FOR CAMH: A STEP-WISE APPROACH

How to operationalize the theoretical considerations mentioned above? Where to start planning or improving services for CAMH? There are a number of key actions needed. They are summarized in Figure J.5.2. It is not important to strictly follow the order of suggested actions, it is much more important to ensure ownership throughout the entire process by a comprehensive team of local stakeholders and active participation of users' representatives.

An example of a global initiative for scaling up mental health care: the mhGAP program

The World Health Organization recently launched the Mental Health Gap Action Program (WHO, 2008a; 2010) aiming to increase coverage of key mental health interventions, particularly in low- and middle-income countries. The program provides technical guidance for the development and implementation of national strategies for scaling up mental health care. It adopts a life-cycle approach and targets children and adolescents, among other age groups. The following are the critical assumptions:

- Mental health care has to be integrated into general health services and mainstreamed in primary care settings
- Non-specialist health care professionals at primary health care level, when receiving appropriate training, can recognize common mental, neurological and substance abuse conditions and provide first-line interventions.

Figure J.5.3 illustrates the mhGAP suggested approach for improving availability of and access to treatment for children and families in need. Core components of the program are the definition of the package of interventions and development of strategies for increasing coverage of those interventions. A template for a package of interventions that can be provided at primary and

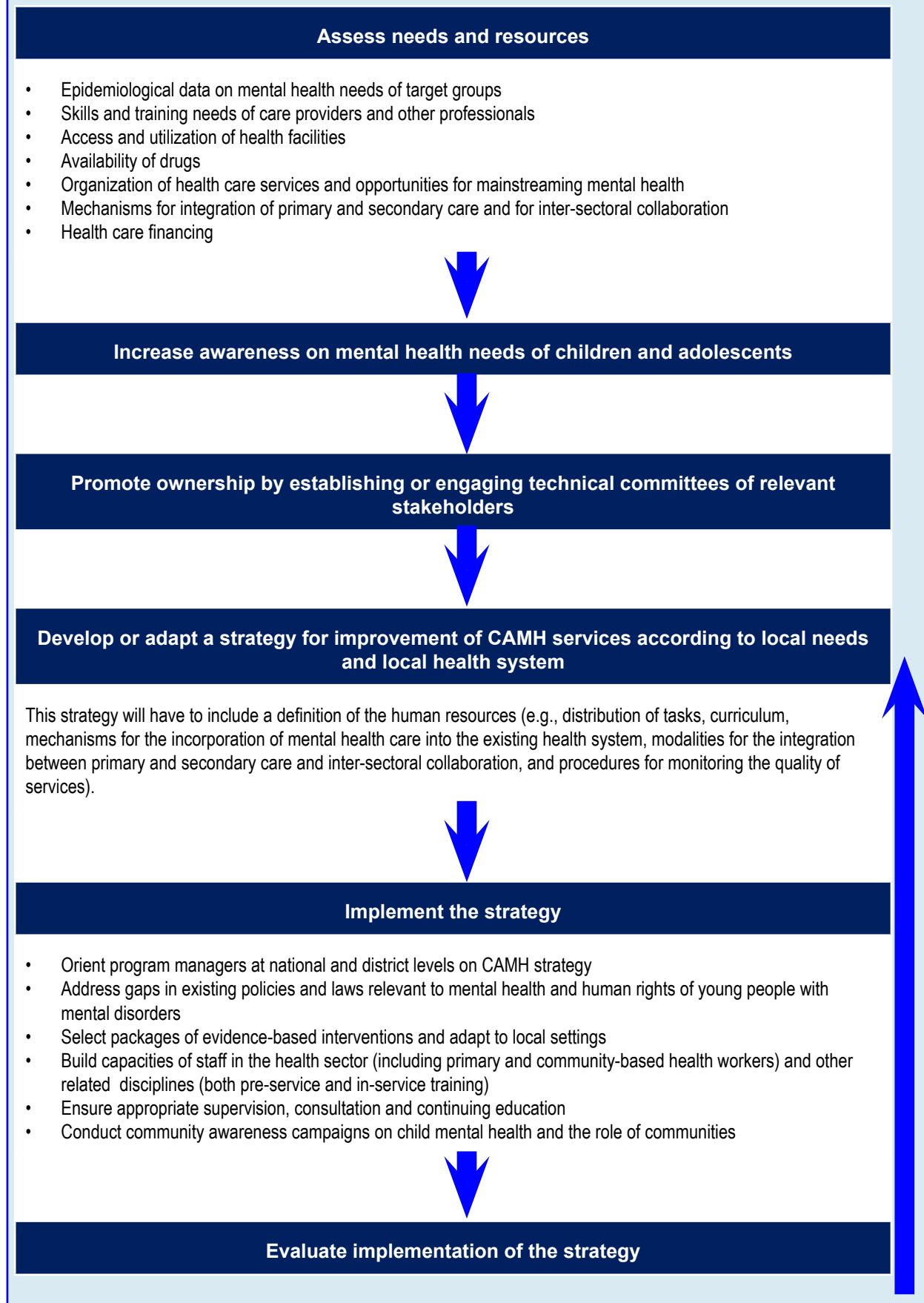
Figure J.5.2 A step-wise approach for improving services for CAMH

Figure J.5.3 mhGAP framework for action.

secondary care levels by non-specialist health care workers has been made available to countries (Dua et al, 2011) but it needs to be adapted to the local context. A team of international experts (Guidelines Development Committee) defined the content of the mhGAP intervention package on the basis of available scientific evidence and agreed criteria. Mental, neurological and substance use disorders that represent a high burden (in terms of mortality, morbidity and disability), cause large economic costs, or are associated with violations of human rights were identified as priority conditions. Cost-effective, acceptable and feasible interventions for prevention, detection and management of these conditions were then included in the package. The interventions are directed at individuals or populations.

Mental disorders in children were identified among the priority conditions. Developmental and behavioral disorders are specifically addressed in the mhGAP intervention package. Specific interventions for the management of depression, epilepsy, psychosis and alcohol and drug abuse in children and adolescents are also included. Table J.5.2 provides examples of evidence-based recommendations for assessment and management of mental disorders in children that were developed by the guidelines development committee.

At country level, a technical task force has to define mechanisms for the delivery and scale-up of the intervention package: at what level of the health care system the interventions will be delivered, who will be responsible for delivering the interventions, and what changes in work tasks, training curricula, and procedures are required. For example, assessment and management of developmental disorders at a primary health care level implies the establishment of structured collaboration mechanisms with mental health specialists, schools, and social and rehabilitation services. As a consequence there may be a need to modify the



Click on the picture to access evidence-based clinical guidelines for the management of priority conditions by non-specialist health care providers at primary health care level. It provides flowcharts to guide assessment and management and is available in several languages.

Table J.5.2 Recommendations for child and adolescent mental health conditions by mhGAP guidelines development committee

Maternal mental health interventions	CAMH 1. For at-risk children, parenting interventions promoting mother-infant interactions, including psychosocial stimulation, should be offered to improve child development outcomes. To improve child development outcomes, mothers with depression or with any other mental, neurological or substance use condition should be treated using effective interventions (see recommendations for treatment of depression and other mental, neurological or substance use conditions).
Parent skills training for behavioral disorders	CAMH 5. Parent skills training should be considered for the treatment of emotional and behavioral disorders in children aged 0-7 years. The content should be culture sensitive but should not allow violation of children's basic human rights according to internationally endorsed principles.
Parent skills training for developmental disorders	CAMH 6. Parent skills training should be considered in the management of children with intellectual disabilities and pervasive developmental disorders (including autism). Such training should use culturally appropriate training material.
Child abuse	CAMH 2. Non-specialized health care facilities should consider home visiting and offer parent education to prevent child abuse especially among at-risk individuals and families. They should also collaborate with school-based "sexual abuse prevention" programs where available.
Intellectual disabilities	CAMH3. Non-specialized health care providers should consider assessment and regular monitoring of children suspected of intellectual and other developmental delays by brief locally validated questionnaires. Clinical assessment under the supervision of specialists to identify common causes of these conditions should be considered. CAMH 4. Non-specialized health care providers should consider supporting, collaborating with, and facilitating referral to and from community-based rehabilitation programs.
Behaviour disorders (attention deficit hyperactivity disorder)	CAMH 7. Non-specialized health care providers at the secondary level should consider initiating parent education/training before starting medication for a child who has been diagnosed as suffering from ADHD. Initial interventions may include cognitive behavioral therapy (CBT) and social skills training if feasible. Methylphenidate may be considered, when available, after a careful assessment of the child, preferably in a consultation with the relevant specialist and taking into consideration the preferences of parents and children.
Pharmacological interventions for children with disruptive behavior disorders or conduct disorder or oppositional defiant disorder	CAMH 8. Pharmacological interventions (such as methylphenidate, lithium, carbamazepine and risperidone) should not be offered by non-specialized health care providers to treat disruptive behavior disorders (DBD), conduct disorder (CD), oppositional defiant disorder (ODD) and comorbid ADHD. For these conditions, the patients should be referred to a specialist before prescribing any medicines.
Somatoform disorders	CAMH 9. Pharmacological interventions should not be considered by non-specialized health care providers. Brief psychological interventions, including CBT, should be considered to treat somatoform disorders in children, if adequate training and supervision by specialists can be made available.
Antidepressants for children with depression	CAMH 10. Antidepressants should not be used for the treatment of children 6-12 years of age with depressive episode/ disorder in non-specialist settings.
Antidepressants for adolescents with depression	CAMH 11. Fluoxetine, but not tricyclic antidepressants (TCA) or other selective serotonin reuptake inhibitors (SSRI), may be considered as one possible treatment in non-specialist settings of adolescents with depressive episodes. Adolescents on fluoxetine should be monitored closely for suicide ideas/ behavior. Support and supervision from a mental health specialist should be obtained, if available.
Pharmacological interventions for anxiety disorders in children and adolescents	CAMH 12. Pharmacological interventions should not be considered in children and adolescents with anxiety disorders in non-specialist settings.
Behavior change techniques for promoting mental health	CAMH 13. Non-specialized health care facilities should encourage and collaborate with school-based life skills education, if feasible, to promote mental health in children and adolescents.

description of management tasks of primary care workers to include liaising with social services and community resources, providing advice to teachers and, when feasible, skills training to parents. Organizational changes and modification in the distribution of tasks and health professionals' curricula at various health care levels are often required. For example, whenever a parent expresses concerns about their child's development, the primary health care staff at the outpatient service can assess the problem, manage any co-occurring medical condition, provide family psychoeducation, and then refer the child to other primary health care outpatient services for follow up and more intensive psychosocial interventions (including parent skills training).

The assessment of needs and available resources is a critical preliminary activity that informs the adaptation of mhGAP template to the local needs, the design of national and regional strategies for its implementation, and prioritization and phasing of interventions. Success in the implementation of the program depends on political commitment at country level. The development/improvement of relevant policy and legal frameworks is important to ensure conditions favorable to the implementation of the program and respect of the human rights of children and adolescents with mental health problems.

A monitoring and evaluation framework is built into the program. A variety of tools is available or being developed to assist countries in its implementation, including an orientation guide for program managers, templates for the adaptation process, questionnaires for the needs assessment, training materials, and supervisory checklists.

Maternal, child and adolescent mental health in the Eastern Mediterranean Region: strategic planning towards improved care

The World Health Organization Regional Office for the Eastern Mediterranean Region has recently undertaken concerted efforts towards the improvement of maternal, child and adolescent mental health services in countries of the region encompassing the crescent extending from Pakistan in the East to Morocco in the West.

The WHO initiated and led a participatory process for the development of Regional Strategic Directions and Actions for Maternal, Child and Adolescent Mental Health Care by working closely with Ministries of Health in the region and availing itself of the technical support of experts in the field. The regional strategic document was discussed during an Intercountry Meeting on 26th-28th July 2010 in Cairo. The meeting was attended by mental health focal points from 21 of the 22 member states of the region in addition to WHO staff and experts.

Participants reached an agreement on key strategic actions to be promoted and undertaken at regional and country levels in the six years' operative period (2010-2015). In particular, the need to assess mental health service gaps and map available resources for child and maternal mental health care was emphasized. Development of human resources, integration of MCAMH interventions within existing primary health care services, promotion of mental health, and strengthening research and monitoring and evaluation were identified as critical needs to be addressed.

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