

Child and Adolescent Mental Health Services in Mexico

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This column provides an overview of child and adolescent mental health services in Mexico, where prevalence rates of mental disorders among young people are up to twice as high as U.S. and Canadian rates. The mental health care system in Mexico is underdeveloped and underfunded, and for the approximately 40% of the population with no insurance, access to and quality of care are particularly poor. This column offers policy recommendations aimed at better meeting the needs of this vulnerable population. (*Psychiatric Services* 61:443–445, 2010)

Mental disorders among children and adolescents in Mexico are highly prevalent, and they pose a significant disease burden. However, mental

health services for this population are scarce and inadequate, and the policy infrastructure is similarly inadequate. In this column we first review the epidemiology of child and adolescent mental disorders in Mexico. We next describe the structural and financial organization of Mexico's national health care system, with a focus on mental health services and policies for children and adolescents. We conclude by discussing policy strategies aimed at improving Mexico's capacity to meet the needs of this vulnerable population.

Child and adolescent mental disorders in Mexico

The Mexican Adolescent Mental Health Survey (MAMHS), a community-based epidemiologic survey conducted in 2005 in Mexico City, found that four of ten adolescents aged 12 to 17 had a psychiatric disorder in the past year (1). Moreover, three-fifths of these youths had a disorder of sufficient severity to require professional intervention. The survey found that those aged 15 to 24 were at particularly high risk because of the sharp increase in incidence of major mental illnesses during this developmental period and the fact that among young people, this age group has the highest incidence of suicidal and violent behavior. Among other noteworthy MAMHS findings, anxiety disorders were the most common and mood disorders were the most severe.

Thus child and adolescent mental disorders are extremely prevalent in Mexico, perhaps twice as prevalent as in the United States and Canada, where 15% to 20% of young people

are reported to have mental disorders. In Mexico extreme poverty, violence, lack of vocational and educational opportunities, homelessness, marginalization of indigenous populations, and other social risk factors for child and adolescent mental disorders affect a significant part of the population. This reality underscores the urgent need to implement child and adolescent mental health services that can meet the needs of this population.

Organization of the Mexican health care system

Mexico's health care system is markedly different for individuals with public insurance coverage—approximately 60% of the population—and those who lack insurance coverage—the remaining 40%. A parallel private health care system that serves self-paying individuals offers expensive services to a very small fraction of the population (2%). Publicly insured individuals are those employed in the formal sector of the economy and their dependents. Care for this population is offered through a network of publicly funded health care facilities (so-called social insurance institutions). These facilities have a stable funding source and offer a fairly well defined benefit package that includes medications. Access to and quality of health care are much poorer for the uninsured, a group composed of individuals who work in the informal economy or who are unemployed and their dependents. This population is served by a vertically integrated network of publicly funded and publicly managed health care facilities. Individuals gain access to the network by paying a flat,

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one-time user fee for each episode of illness. Although the fee is based on a person's ability to pay and is heavily subsidized, it contributes to high out-of-pocket expenses for a sector of the population with extremely limited spending capacity.

Shortages and lack of medications caused by budgetary limitations at the public facilities expose uninsured individuals to further out-of-pocket expenditures. Quality of care is extremely variable at these facilities. Further, because institutions are responsible for stewardship of and financing and delivery of services to only the group they serve, there is little or no administrative or clinical coordination between them. In addition, access and quality vary significantly by geographic region.

Supported by a combination of state and federal funding, the country's 32 states have full autonomy to administer their health care systems. Because states differ substantially in their tax base and other resources and in the degree of social need, states also differ substantially in their health investments, as measured both by their per capita health expenditures and by the fraction of their budgets allocated to health (2).

A proposal for health system reform was put forth by Julio Frenk, M.D., Ph.D., formerly Mexico's minister of health and now dean of the Harvard School of Public Health. The proposal identified steep out-of-pocket and catastrophic expenses saddling the uninsured as main targets for reform (3). The Frenk proposal was signed into law in 2003 and was launched in 2004. Although implementation is still in an early phase, it is the most solid and broadly encompassing initiative to address health inequities in the country.

Mental health services in Mexico

Although the federal government has made several attempts to develop a national mental health policy (4), improvements in access to and quality of mental health care have been modest at best. The mental health care system in Mexico is underdeveloped and underfunded, and as a result, high-quality mental health services have been largely unavailable to most Mexicans (5,6). Historically, the federal government has assumed responsibility for

the care of persons with mental illness in Mexico. Most mental health services are provided through 33 large psychiatric hospitals concentrated in Mexico City and other large cities, some of which are in substandard physical condition and many of which provide largely custodial care. Few formal mental health services are provided in the community, and primary health care providers rarely offer diagnostic or treatment services for people with mental illness (7).

Service use studies in the country indicate that less than one-fourth of adults in need of mental health services receive any care and that less than 3% of adults who have a severe mental illness receive adequate care (8). Firm evidence is lacking on the quality and effectiveness of mental health care, yet an evaluation of mental health services in Mexico conducted in 2002 by an international team suggests that available services are of poor quality, largely hospital based, and concentrated in a few large cities (9).

Mental health services for children and adolescents

In the past 25 years, Mexico has reduced child mortality as a result of public health programs aimed at improving sanitation and of policies aimed at improving the general health of children through health promotion, prevention of infectious diseases, and oral rehydration programs. However, general medical services for children and adolescents are deficient throughout the country. The situation is even more dire with regard to mental health services for this population. For example, the MAMHS found that in 2005 less than 14% of children and adolescents with a current psychiatric disorder received treatment for the disorder. Severity and presence of a substance use disorder predicted likelihood of receiving care; however, youths with anxiety and depressive disorders were the least likely to receive any care. Most mental health services were provided by specialty care providers, with little care from pediatricians and other primary care providers. The school system and other non-health sector systems, such as the social welfare system, provided some services. Furthermore, among youths who received any mental

health care, half received only minimally adequate care (1).

A large number of evidence-based mental health treatments for children and adolescents that are typically delivered in the primary, secondary, or tertiary care sectors in the United States and other developed countries are not available in Mexico. Rural populations and indigenous peoples may bear the largest burden because their access to high-quality child and mental health services is very limited.

The infrastructure is extremely deficient, lacking in both material and human resources. The psychiatric workforce is utterly insufficient to meet the need. Among other deficits, there are only 200 psychiatrists in Mexico who are licensed to provide treatment to children, or .5 child psychiatrist per 100,000 children. This compares very poorly with Canada's ratio of six per 100,000 (10). Training programs for child and adolescent mental health providers are unable to meet the country's human resource needs. Furthermore, no formal training programs focused on detection and treatment of mental disorders are available for primary care providers and other health professionals. Thus development of a professional workforce with the necessary competencies to treat children and adolescents is a tall order that needs to be addressed with urgency if a high-quality mental health care system for this population is the goal.

Child and adolescent mental health services in Mexico are delivered through an underfunded, underresourced, and uncoordinated network of institutional providers isolated from the larger health care system. Improving access and quality of mental health services for children and adolescents has yet to become a priority for federal or state policy makers. This is evidenced by the fact that although expanding insurance coverage for the poorest members of society and enhancing maternal and child care are among the key goals of the Frenk reform proposal (4), the proposal contains only a few objectives relevant to child and adolescent mental health.

Policy strategies

Mexico is a signatory to the Universal Declaration of Human Rights (1948),

the United Nations Convention on the Rights of the Child (1989), the Declaration of Caracas (1990), and other human rights manifestos with specific provisions regarding mental health care. Therefore, federal and state governments have an ethical and a legal obligation to provide adequate mental health services to Mexican youths. A critical first step involves formulating a national child and adolescent mental health plan organized around key objectives. Legislation would need to be passed to ensure the successful implementation of the plan. To maximize its effectiveness and efficiency, a national mental health plan for children and adolescents should be well integrated with the already existing national health and mental health plans, and it should clearly assign responsibilities and areas of accountability within the government.

The plan should address Mexico's profound inequalities in health and health care, which are inextricably linked to the country's social and geographic inequalities. In addition, it should address not only the treatment needs of children and adolescents but also concern itself with promotion of mental health, prevention and early detection of mental disorders, and rehabilitation of mental disorders, particularly for vulnerable youths, such as homeless youths. To improve the reach and quality of child and adolescent mental health care, the plan should set explicit access and quality improvement objectives and promote the modernization of health care through the adoption of information systems and through workforce training.

Furthermore, the plan should be prescriptive with regard to the organization and financing of services. For example, because the integration of child and adolescent mental health services into primary care has been shown to be an effective strategy in countries similar to Mexico (11), the plan should call for the deployment of multidisciplinary child and adolescent mental health teams in primary care clinics. Although such services would be a critical component of a reorganized mental health service system for this population, they would be part of a continuum of services that include community mental health centers,

psychiatric beds in general pediatric hospitals, and Hospital Psiquiátrico Infantil Juan N. Navarro (HPIJNN), Mexico's largest inpatient and outpatient mental health facility for children and adolescents. Services at HPIJNN should be downsized, and the hospital should be consolidated as a tertiary referral center and its role circumscribed to the care of children and adolescents with severe mental disorders. As a result of this reorganization, resources for children with less severe mental disorders could be reallocated and used to fund the primary care-based multidisciplinary child and adolescent mental health teams.

Multidisciplinary teams consisting of a full-time-equivalent child and adolescent psychiatrist or child psychiatry resident, social worker, and nurse would cover a catchment area with two or three primary care clinics. Their activities would include promotion of mental health and detection and prevention of mental disorders through collaboration with schools, detention centers for young offenders, and social welfare centers, as well as referrals to specialty services.

The plan should be drafted with the input of key stakeholders, such as the Union for Psychiatric Reform, an advocacy group representing families and patients with mental disorders; the Mexican Council of Psychiatrists, Mexico's professional association of psychiatrists; academic institutions; and mental health research programs. A participatory process is key to ensuring broad support for the plan. Such a process is important given the magnitude of the cultural and organizational change associated with transforming a fragmented system with a custodial orientation into a community-based system focused on the prevention and treatment of mental disorders and rehabilitation. The plan should call for collaboration and intersectorial coordination with the social services, education, and judicial systems, a goal that would be facilitated by creating awareness in those sectors of the negative impact of untreated mental disorders on their respective agendas.

Once formulated, the plan could be piloted in the Mexico City metropolitan area, Mexico's largest city and the seat of HPIJNN. The pilot project

should monitor service use, outcomes, and costs. These data and recent epidemiological findings attesting to the high prevalence of mental disorders in this population should be used to seek an increase in public funding for mental health services for children and adolescents.

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References

1. Benjet, C, Medina-Mora ME, Borges G, et al: Youth mental health in a populous city of the developing world: results from the Mexican Adolescent Mental Health Survey. *Journal of Child Psychology and Psychiatry* 50:386–395, 2009
2. Dignity Counts: A Guide to Using Budget Analysis to Advance Human Rights. Fundar, Centro de Análisis e Investigación; International Human Rights Internship Program; and International Budget Project, 2004. Available at www.iie.org/ihip/dignity_counts.pdf
3. Frenk J, Gonzalez-Pier E, Gomez-Dantes O, et al: Comprehensive reform to improve health system performance in Mexico. *Lancet* 368:1524–1534, 2006
4. National Mental Health Program, 2007–2012 [in Spanish]. Mexico City, Secretary of Health, 2007
5. Innovative Mental Health Programs in Latin America and the Caribbean, Pan American Health Organization, Washington, DC, 2008
6. Caldas de Almeida JM, Horvitz-Lennon M: An overview of mental health care reforms in Latin America and the Caribbean. *Psychiatric Services* 61:218–221, 2010
7. Salgado-Snyder VN, Díaz-Pérez MJ, González-Vázquez T: A model for integrating mental healthcare resources in the rural population of Mexico [in Spanish]. *Salud Publica Mexico* 45:19–26, 2003
8. Medina-Mora ME, Borges G, Muñoz CL, et al: Prevalence of mental disorders and service use: results of the National Psychiatric Epidemiological Survey of Mexico [in Spanish]. *Salud Mental* 26(4):1–16, 2003
9. Evaluation of Mental Health Services in Mexico [in Spanish]. Pan American Health Organization and World Health Organization, 2003
10. Kirby MJL, Keon WJ: Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada. Ottawa, Standing Senate Committee on Social Affairs, Science and Technology, 2006
11. Mental Health Policy and Service Guidance Package: Child and Adolescent Mental Health Policies and Plans. Geneva, World Health Organization, 2005