Child and adolescent mental health in Latin America and the Caribbean: problems, progress, and policy research

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Key words: mental health, mental disorders, mental health services, child, adolescent, Latin America, Caribbean region.

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The nations of Latin America and the Caribbean (LAC) have many contrasts in the advances that they have made in the areas of child and adolescent mental health policy, research, and training. Within the LAC countries there exist the most sophisticated of child mental health programs based on comprehensive primary care models (Chile), strong advocacy programs with government support at the highest levels (Brazil and Costa Rica), and state-of-the-art research and training programs (Argentina, Brazil, and Chile) (1). Of particular note is the strong understanding and utilization of a rights-based framework for services development throughout LAC. On the other hand, the LAC nations have some of the most intractable child mental health problems seen anywhere on the globe. Inhalant use is endemic in parts of Brazil and Mexico, street children with overt mental health problems go totally unattended in Brazil and elsewhere, and youth crime is epidemic in some LAC cities.

Economic resources are needed for governments to support mental health care, and families need adequate incomes and stability to be able to access care. However, the LAC countries show some of the most dramatic discrepancies in income distribution in the world. Some studies have suggested that approximately 10% of the population earns 90% of the total income (2). Huge economic problems in the LAC nations in the last two decades have produced a substantial reduction in the proportion of persons who are in the middle class, as well as a tremendous decrease in investments in social and health programs (3).

From a psychosocial point of view, many children in the LAC countries face daunting risk factors. Poverty forces a vast number of children to live on the streets and predisposes them to become involved very early in their lives in drug use, crime, violence, and unprotected sex. This has serious consequences for their health, especially mental health (4). These homeless children demonstrate significant deficits in development related to social reciprocity, moral precepts, and self-esteem compared to children who are still living with their low-income families (5). Another important source of mental suffering for children and adolescents in some LAC countries has been social and political unrest. It is estimated that 6 000 to 14 000 children take part in armed conflicts in Latin America, and more than 10 000 children are in the army in Paraguay (6).

In the past few years, economic improvements in some LAC countries have made it possible to allocate small but important new resources for programs devoted to promoting child development and improving children's lives in general, with some resources specifically targeting mental health. These programs have been designed to address issues recognized as priorities by the individual countries. However, with few exceptions, these programs have not been systematically evaluated. Evaluation is essential for establishing sustainable programs. The goal of many programs is to enhance access to services and to reduce historical exclusion from appropriate services. Health exclusion is an important indicator that can be systematically evaluated by utilizing information internal to the health system, such as treatment availability, institutional births, and the population with health insurance. In the case of children with potential mental health problems, school dropout rates can also serve as an indicator. Dropout rates are high in some LAC countries due to the need for children to work and provide income for their families, and many other school-age children have to stay at home to take care of younger siblings (7). For instance, it is estimated that 95% of children have access to school in Brazil, but only 59% of them finish the 8th grade (8). It is well established that school dropouts have worse outcomes, including in terms of mental health status, than do those youths who stay in school (9, 10), so this situation poses a major problem in the LAC nations. By knowing which populations are more likely to be excluded from mental health services, specific strategies to improve the rate of service utilization can be designed.

Epidemiological mental health data specific to the LAC countries is essential for developing programs that will meet the needs of the affected populations of children and adolescents. The LAC nations lack data using representative national samples that would provide needed guidance for policy and services. Duarte et al. (11) reviewed the literature on epidemiological studies on child mental health in Latin America. The few studies that were found had been conducted with population samples drawn from relatively small, homogeneous local areas within countries, and/or the studies addressed specific mental health problems such as attention-deficit/hyperactivity disorder (ADHD) (12). Results of studies conducted in school, clinical, or primary care settings should be viewed with caution since many children do not go to school, and access to mental health treatment is largely determined by social class (11). Therefore, any conclusion on the overall prevalence of child mental health disorders in the LAC nations should be considered an estimate.

Most of the epidemiological investigations conducted in the LAC countries have used instruments from developed countries, without adequate cross-cultural validation. Although some child psychiatric disorders (mainly those with a clear biological basis) may have a similar clinical presentation in both developing and developed countries (13), several child mental disorders reflect their differing cultural contexts (14).

Recently, a well-designed study in Brazil (although based on a sample of school students from just one part of the country) was conducted to assess the prevalence of psychiatric disorders in children and adolescents from 7 to 14 years of age in a medium-sized city and its surrounding rural areas in the state of São Paulo (15). Diagnoses of mental disorders were based on *Diagnostic and statistical manual of mental disorders fourth edition* (*DSM-IV*) criteria through the use of the Development and Well-Being Assessment, a structured multi-informant assessment interview. This instrument was extensively evaluated to check its cross-cultural validity. Random sampling of schools (stratified into private, public rural, and public urban) was followed by random sampling of students from school lists. A sample consisting of 1 251 subjects was assessed, representing 83% of those approached. The overall weighted prevalence rate of psychiatric disorders was 12.7% (95% confidence interval (CI) = 9.8%–15.5%). Disruptive behavior disorders (oppositional defiant disorder or conduct disorder) were the most prevalent disorders (7.0%; 95% CI = 5.1%– 8.9%), followed by anxiety disorders (5.2%; 95% CI = 3.4%–7.0%). Lower prevalences were found for hyperkinetic disorder (1.8%; 95% CI = 0.7%–2.8%) and depressive disorder (1.0%; 95% CI = 0.2%–1.9%). The 12.7% overall weighted prevalence of mental disorders was significantly higher than the 9.7% prevalence found in Great Britain using comparable measures and diagnostic procedures.

Findings from the Brazil study (15) and from other epidemiological studies of mental health among youth tend to suggest that when similar methodologies are utilized (11), developing and developed countries have similar results in terms of prevalence estimates, age trends, gender differences, and the pattern of comorbidities. However, very few studies with adequate methodologies have been conducted to investigate the impact of risk and protective factors on prevalence rates of child mental disorders in the LAC countries. Unusual epidemiological findings, such as extremely high prevalence rates of drug use/abuse, have been found in special populations of children, such as street children, working children, and children exposed to war or political conflict (11).

Additional data on the LAC countries come from the World Health Organization (WHO) Child and Adolescent Mental Health Atlas project (16), a systematic survey of key informants done to assess country resources for child and adolescent mental health. The questionnaire survey documented the presence or absence of child mental health policy at the national or local level in many LAC countries. An important finding was that there appears to be a huge gap between written policies and their implementation. The ingredients that are most often lacking include the political will to develop and sustain policy (17), financial and human resources to implement the policy, and ongoing attention to the policy once it has been implemented. Upheavals in LAC economies have clearly impacted the degree to which mental health issues can capture the attention of politicians, who must consider the promulgation of many policies that have substantial economic consequences.

The WHO Atlas project documented the presence of a rights-based approach in many LAC countries. The importance of a human rights perspective appears to be a commonly acknowledged part of the approach to care for the mentally ill, and it represents a particular strength. Sensitivity to these issues varies depending on a country's political history. The Atlas project and other sources have also documented the importance of nongovernmental organizations (NGOs) in the systems of care in the LAC nations.

A positive example of an NGO using a human rights framework comes from Costa Rica. The *Fundación Paniamor* (Paniamor Foundation) works to protect children's human rights. The NGO focuses on preventing rights violations, through information sharing, education, training, lobbying, and public campaigns. Outcomes of their efforts have included: (1) an increased awareness and prevention of child maltreatment, (2) the promotion of and participation in the development of new legislation to improve the situation of children and to protect their human rights, (3) reintegrating high-risk adolescents into school and/or training them to be employable, and (4) creation of the largest database on child welfare in Central America.

NGOs are participating in child and adolescent mental health issues in the LAC countries in various other ways. For example, associations of families of patients with mental disorders in some countries have been working to advocate better treatment of children with mental illness. There are also disorder-specific NGOs in some LAC nations, such as one for ADHD patients and their families in Brazil (see www.tdah.org.br). There is a need to strengthen NGOs in the LAC countries since the NGOs are in an excellent position to influence the political process. The NGOs can also be incorporated into the process of planning for a coherent, policy-guided system of care.

Despite economic hardship and political turmoil in the LAC countries, the United Nations Convention on the Rights of the Child (UNCRC) has been embraced to a remarkable degree, and the use of the UNCRC has had a demonstrable impact on policy and program development (18). However, as far as we know, no LAC nation has used a systematic evaluation mechanism or conducted research to assess the effectiveness of rights-based programming. A Brazilian project to begin such an evaluation is now being planned. The project will assess the effectiveness of "guardianship councils," which advocate for child well-being. The councils were a direct outgrowth of the Brazilian Government's ratification of the UNCRC in 1990. The ratification has brought all children—not just those who have violated the law—into the framework of legislation recognizing them as citizens, with their own interests, who should be treated as fully active participants in society and not as passive recipients of philanthropic actions. Councils can now be found throughout Brazil. The research on the project will document the impact that the councils have had on child health and well-being.

SERVICES AND TRAINING

The WHO Atlas project survey has documented that the LAC nations vary in terms of both the theoretical orientation of their clinicians and the types of services provided. The Atlas and other sources report a virtual absence of access to medications in some areas of the LAC countries. Historical roots are often the basis for the differences in available clinical services. The nations vary in how much they utilize individuals who do not have training in mental health to provide care for children with mental disorders. Some countries have many psychologists, learning specialists, and other, similar professionals who can participate in the development of a continuum of care, while other nations have virtually none of these specialists.

Although psychoanalysis continues to be the most prominent framework for child mental health training and services in the LAC countries, the last 15 years have been marked by the emergence and wider acceptance of a bio-psycho-social model for training and services (19). Now, modern concepts of child psychopathology and psychiatric nomenclature, biological psychiatry, family therapy, and cognitive-behavior therapy are extensively incorporated into the understanding of child mental problems, at least in university centers (12). However,

cultural and historical determinants continue to hamper the development of a more integrative way of conceptualizing mental disorders in the LAC nations. Families often have difficulty accepting any role for brain dysfunction in emotional problems, and psychopharmacologic interventions are less developed and less accepted (20).

The majority of services and training are concentrated in large cities, either at university centers or in the private sector. The existing initiatives depend most of the time on personal efforts and preferences (21). An important part of the clinical work in most LAC countries is addressed to severe and rare child mental disorders, or to interventions not supported by modern evidence-based medicine.

A problem that runs throughout the areas of training and services is the divide between the rich and the poor. It is evident that the attraction of private practice is drawing child psychiatrists into private practice, where the financial rewards are greater. This leaves the public sector with a shortage of needed personnel. Further, there is a definite movement of trained child psychiatrists out of the LAC countries because of economic concerns or quality of life issues. Efforts need to be made to reverse these trends. On the services side, as long as better-off families can obtain the care they need outside the public sector, there will be a diminished incentive to establish meaningful public systems of care that can be accessed by all persons.

Given the challenges of providing care and mobilizing both financial and professional resources, efforts must be made to increase the awareness of and potential for preventive interventions. However, traditionally in the LAC countries the family has played a major role in society, so no prevention program has a chance of success without fully involving families in the process.

Improving child mental health services and training depends on profound and large-scale socioeconomic and political changes in the LAC nations. However, waiting for these changes may not be the most realistic strategy (11). Four suggested general guidelines for the future of training and services are given in the following paragraphs.

First, programs addressing infant mental health that promote community mobilization and that improve social networks are needed. Simple, integrative, inexpensive interventions should be emphasized. Regular home visits by a trained nurse from the prenatal period until a child is 2 to 3 years old could concomitantly address both general and mental health issues with the family (11).

Second, child mental health providers who are not specialists should be trained in less complex interventions such as using medication for uncomplicated ADHD cases, brief cognitive-behavioral interventions for mild cases of anxiety or depressive disorders, and parental management of problems of parent-infant interaction and developmental problems of adolescents.

Third, child mental health services should be supported for special populations such as indigenous groups, children of refugees, street children, pregnant adolescents, and abandoned or victimized children.

Fourth, there is an urgent need to encourage child mental health professionals to work collaboratively with schools, with primary care providers, and with persons in sectors other than health care in delivering integrated systems of care. Programs in these settings should aim to: (1) educate teachers and pediatricians to recognize and manage the most prevalent child psychiatric problems; (2) implement basic crisis management techniques to deal with simple family problems; (3) develop school and community programs where children and their parents can discuss issues related to self-esteem and quality of life; (4) provide care for the caregivers, with support groups for professionals; and (5) teach professionals when and how to refer the most severe cases. Finally, for more developed countries, such intervention programs should be frequently assessed for cost-effectiveness (21, 22).

POLICY-RELEVANT RESEARCH

While more traditional child psychiatry research is in evidence in academic settings in the LAC nations, the Pan American Health Organization (PAHO) has taken a special interest in identifying and supporting research that is relevant to policy concerns. PAHO and WHO are working in close collaboration with Harvard Medical School (Boston, Massachusetts, United States) and Columbia University (New York City, New York, United States) in supporting the development of model research projects derived from an assessment of key issues in selected LAC countries. Representative projects from Brazil, Chile, Colombia, Costa Rica, and Jamaica have been identified, and the projects are now being refined to incorporate common process and outcome measures. The common research components are dependent on securing funding, which may come from various sources. The ultimate research goals are to: (1) identify principles that should guide the development of child mental health policy in the LAC nations and (2) initiate a discussion about country-specific principles, goals, and strategies related to the formulation and implementation of child mental health policy. The five projects are described in the following subsections.

Child health rights in Brazil

Enacted in 1990, the Brazilian Child and Adolescent Rights Act goes beyond a declaration of child rights and actually mandates the means to facilitate the implementation of these rights. The Act states that every Brazilian municipality should have a child rights council and a child guardianship council (GC). Targeting a population at high risk for multiple negative outcomes with a community-based strategy could be an effective way of helping children who usually do not have access to health care, education, proper nutrition, or a safe place to live. The research will evaluate the impact on child health in general and on mental health in particular that has come from implementing the GCs. The research will describe how much the health-related actions of the GCs vary by child age, gender, socioeconomic status, and location; examine changes in objective health indicators associated with the GCs; and study the interface that GCs have with different segments of the health care sector, as well as with children involved with other sectors that also provide care.

Community empowerment for child health and development in Jamaica

Impairment of optimal development in the early childhood years, and its impact on school failure in the primary and secondary years, occurs in many countries, but it is particularly prevalent in developing countries. There is relatively little information available about the factors contributing to impaired development in children from developing countries. The Jamaican research and intervention programs are expected to include community child development education and parenting seminars; child health and development screening and education programs at health centers; development of a parent-held, culturally relevant child development record; in-service training for day-care and primary-school teachers; and provision of appropriate educational materials on child development at day-care and primary schools.

A depression treatment model to protect children and strengthen the family in Costa Rica

When parents suffer from depression, the illness affects not only them but all areas of family functioning. Any treatment approach for depressed parents should take into consideration the known risk factors for depression, and it should have a preventive component. A family-based strategy seems particularly suitable to accomplishing such tasks. This project in Costa Rica will test the validity of a depression treatment model that has been proven elsewhere. The model is intended to prevent parents' depression from having consequences for their children. The project will train local health workers in the use of this model. In turn, these clinicians will train more local health professionals in order to propagate and extend the coverage of the intervention for depressed parents and their families. Another goal of the project will be to start a preventive mental health intervention program among the mental health systems in Costa Rica.

An evidence-based developmental health service in Chile

Research has shown that an integrated health intervention that transforms a child's life experience improves the child development outcomes, thus pointing to the need for health care systems that are designed to improve developmental health. The purpose of this research in a middle-income area of Chile is to add to the knowledge about child development, and to contribute to policy-making on child development through scientific evidence on health care.

Mental health promotion to build better citizens in Colombia

Children in the city of Medellín, Colombia, grow up in a highly violent environment. For the past several years there has been a pilot program in the city called the "Peaceful Coexistence Program"—"Early Prevention of Aggression Project," which has used public education to build awareness, and has done mediation work with various groups. While the current initiative has not met with the expected success, community leaders and academicians are convinced that an intervention could prevent violence. A decision has been made to develop two things: (1) a program beginning to work on child growth and development when children are younger and (2) a healthy schools initiative. The intervention will apply the social ecology concept developed by Earls and colleagues (23), coupled with the life course health development concept utilized for many years by WHO.

A VISION FOR THE FUTURE

With adequate political will the vision for child mental health services, training, and research

in the LAC countries can be expanded, drawing on the experiences in other regions of the world that have faced or are now facing similar challenges. The next three paragraphs describe three specific actions that we believe are both feasible and in the best interests of developing a long-term strategy for child and adolescent mental health in the LAC nations.

One step would be to initiate a yearly research training seminar that would help to develop a cadre of young LAC researchers and establish key mentoring relationships. This kind of mechanism has been very successful for many years in the WHO European Region. To initiate such an LAC program, a primary sponsor is needed, along with the involvement of key researchers in the LAC countries and possibly non-LAC researchers who have an interest in LAC activities.

Another possible action would be to establish an LAC child and adolescent mental health training committee. This could be done under the auspices of one of the LAC child and adolescent mental health professional organizations, or it could be established ad hoc by PAHO. Such a group could carry out a systematic study of existing training programs, coordinate them, and identify extrabudgetary resources for additional training programs. One model for establishing more uniform standards is the European Union of Medical Specialists, which provides training guidelines and accreditation for specialists.

Another measure that we recommend would be to establish an LAC mechanism for the dissemination of model programs. The LAC countries have no lack of interesting, innovative, and meaningful programs, but there is no consistent mechanism for program dissemination. With the downturn in the LAC economies, using professional meetings is no longer an effective mechanism for broad dissemination. These meetings also often fail to involve important stakeholders from the education, health, and political spheres. One possibility would be to establish an LAC journal on child and adolescent mental health. This might be done in collaboration with the *Journal of the American Academy of Child and Adolescent Psychiatry* or as a collaborative effort by LAC academic institutions.

CONCLUSIONS

The LAC countries have long been concerned about child and adolescent health, including mental health. LAC professionals are active in professional organizations and scientific inquiry around the world. Coupled with vigorous political will based on the framework of the UNCRC, this concern and professional expertise could usher in a new era of progressive development in child and adolescent mental health in the LAC nations.

Acknowledgements. The authors appreciate the review of this paper by Claudio Miranda, former PAHO Regional Advisor on Mental Health.

SINOPSIS

Salud mental de niños y adolescentes en América Latina y el Caribe: problemas, avances e investigación en políticas

La situación de la salud mental de los niños y adolescentes en América Latina y el Caribe es muy desigual, como lo son la composición étnica, los avances macroeconómicos, la estabilidad y las estructuras políticas, la organización social, la forma de control gubernamental sobre los servicios de salud mental, el grado de urbanización y la turbulencia política y social en los diversos países. Los recursos destinados a las investigaciones y servicios clínicos varían también de un país a otro. Muchos de los países latinoamericanos y caribeños cuentan con programas innovadores de salud mental, pero falta coordinación en la planificación y la asignación de los recursos. En el presente artículo se identifican los aspectos clave relacionados con el déficit en la capacidad de estos servicios en América Latina y el Caribe. Se exponen las nuevas iniciativas dirigidas a mejorar el acceso a los servicios y a mejorar su calidad sobre la base de proteger los derechos de los pacientes, entre ellas algunos novedosos programas preventivos. Además, se describe el énfasis creciente en las investigaciones relacionadas con las políticas.

Palabras clave: salud mental, trastornos mentales, servicios de salud mental, niño, adolescente, América Latina, región del Caribe.

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Manuscript received 28 September 2004. Revised version accepted for publication 19 August 2005.

Children are living beings—more living than grown-up people who have built shells of habit around themselves. Therefore it is absolutely necessary for their mental health and development that they should not have mere schools for their lessons, but a world whose guiding spirit is personal love.

Rabindranath Tagore,
Indian poet (1861–1941)