International Child and Adolescent Mental Health

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Goal

This chapter delineates areas of concern in international child and adolescent mental health and focuses on issues of particular clinical import to child and adolescent psychiatrists and other child mental health clinicians. Many of the topics that are addressed are now relevant to domestic practice given widespread global immigration patterns

Overview

International child and adolescent mental health embraces the world view on the place of children in society, the appreciation of diverse behavioral styles, the identification of psychopathology, and the setting of priorities for the use of scarce resources. As noted in the seminal articles on child psychiatry in developing countries (1-3), child and adolescent mental health is influenced by the economics of countries and societies within countries, by the internal and external displacement of children and adolescents through war and catastrophe, by the role of the child in the family, and by the place of women in society. New knowledge and greater recognition of the impact on children of exposure to trauma, sexual and physical abuse, inhumane living and working situations, inadequate health care, and drug abuse have heightened interest in approaches to ameliorating the impact on child and adolescent health and mental health of these potentially pathogenic influences. It is a challenge to child and adolescent psychiatrists and allied professionals to be active participants in understanding the nature of the problems faced and in being a part of the solution (4).

The overall health and well-being of children are international concerns. All countries with the exception of the United States of America have ratified the 1989 United Nations Convention on the Rights of the Child (5;6). It commits countries to "ensure that all children have the right to develop physically and mentally to their full potential, to express their opinions freely, and to be protected against all forms of abuse and exploitation." The concern among some countries was the perception that ratification of the treaty would intrude on sovereign rights and/or traditional views of the child in a dependent position in society. In the end these concerns did not impede ratification but do impact implementation. In some countries that are party to the treaty, the affirmation of the rights of children has not resulted in benign policies toward the protection of children from harm or the fostering of positive development.

In the international arena, and increasingly in multi-cultural societies child mental health and child psychopathology cannot be gauged solely from a Western perspective. It is simplistic to state, but meaningful to understand; that what may appear pathologic in one country or society, or to one cultural or sub-cultural group within a country, may be deemed normative or adaptive in another. This does not imply that it may not be helpful to have a consensus about a frame of reference regarding psychopathologic conditions, but the interested party must keep an open mind in attributing cause to behaviors, interpreting

responses to events, or judging parental or familial interactions with children. The complexity of understanding children and adolescents embraces anthropologic, social, psychological, political, and rights dimensions. For the domestic practitioner understanding the culture of the individual is important. For example, Murthy (7) reports that studies have found that suicide rates among immigrants are more closely aligned to the rates in the country of origin than to the rates in the country of adoption. Generally, suicide rates of immigrant populations are higher than in the country of origin. The methods of suicide are those used traditionally in the culture of origin. Canino et al. (8) also documented the persistence of the importance of culture-bound syndromes.

In many resource-poor countries, educational institutions represent the most coherent system embracing children and adolescents and provide the primary venue for health-related interventions. As never before, the value placed on education in societies is being emphasized as agrarian pursuits have become commercialized or made nonviable. In resource-poor countries, the impact of technology is differentially affecting parts of society. On the one hand, technologic advance offers an unprecedented opportunity to the educated, but on the other, it accelerates inequality with the less educated. Urbanization combines with the technology revolution further to challenge accustomed ways that may stress individuals and families (9). Children and adolescents, as students or as part of a family, experience new stresses that convey either advantage or disadvantage, depending on access, intelligence, and resources. In response to these changes in society, resilience-building programs in schools, along with primary care health programs in communities have evolved. While the emphasis on education may be profound in urban settings in resource-poor countries, the role of traditional healing for child mental health disorders, especially in rural settings, remains powerful (10-15). In Cambodia, the taxonomies and explanatory models of childhood illnesses are embedded in powerful beliefs about the role of ancestral spirits and the preceding mother from the child's previous incarnation. (16).

The role and responsibilities of child and adolescent psychiatrists and other child mental health professionals vary in resource-poor countries. The competencies of the child and adolescent psychiatrist must fit the needs of the society in which they exist. For example, epilepsy and mental retardation clearly fall within the expected clinical competencies of child and adolescent psychiatrists in resource-poor countries but not in resource-rich countries. . The infrastructure in some countries post-conflict may have decimated the child mental health workforce – in Cambodia, for example, where the country's entire infrastructure, including the health system, was destroyed during the Khmer Rouge regime, in 1979 none of 43 surviving medical doctors in Cambodia were psychiatrists (17).When child psychiatry is a very scarce resource, there may be the opportunity for only a consultative role, limited diagnostics, and an inability to be part of or stimulate discussion of national policy. Child and adolescent psychiatrists coming to resource-poor countries may play a vital role in educating others but must be willing to increase their cultural competence, self-reflection and to in this way increase their mindfulness of the local cultural context, inherent capacity of the existing systems, and careful to ensure the provision of appropriate education.

In understanding the impact of child and adolescent psychiatric disorders, it is not sufficient to understand diagnosis alone. Significant gains have been made in raising the consciousness about the mental health of children and adolescents, as well as adults, by bringing attention to the "burden" of mental illness (18) The global burden of disease is now most often measured in disability-adjusted life-years (DALYs). This approach makes possible a more standardized assessment of the burden of disease as measured by lost opportunity, diminished function, and the cost of treatment and rehabilitation, and it has gained a supportive response from policy makers. From the child mental health perspective,

DALYs have limitations in that they do not quantify negative or positive effects of behaviors but only address outcomes. As a result, the importance of behaviors that start during childhood and adolescence but result in disease and death only later in life may be underestimated by this approach.

Contextual Concerns Associated with Mental Dysfunction

Displacement

The global problem of displacement from family, home, community, and country are of enormous importance to the mental health of populations. Displacement by war resulted in approximately 21.5 million refugees in 1999. An additional 30 million, 80% of whom are children and women, were displaced internally. Fullilove (19) emphasizes the importance of "place" in the healthy development of individuals. Sampson et al. (20) specifically address the importance of the community as a mediator and contributor to the impact of violence on children and adolescents. The delineation of the importance of collective efficacy in communities is an important concept when one considers the impact of imposed poverty, housing disruption, and displacement in ethnic conflicts affecting previously closely aligned groups. In resource-poor countries, the notion of "place" and community are of equal or greater importance. The disruption of traditional communities by war, famine, and natural disaster leave children and adolescents in vulnerable situations that affect mental health. Internal displacement by war and famine leads to the breakup of families, months and years of uncertainty, disruption of education, and physical illness. Forced emigration and the loss of parents and relatives in war often mean abandonment or orphaning of children and adolescents. Although these stressors may serve to demonstrate the enormous resiliency of youth, they often lead to depression, suicide, and a range of stress responses.

The problems of displacement from homes, families, communities, and countries affect children in a host of ways. Zivic (21), in a study of Croatian children during war, found significantly higher depressive and phobic symptoms in displaced refugee children than in local children in stable social conditions. Laor et al. (22), in a developmental study of Israeli children exposed to Scud missile attacks, found higher externalizing and stress symptoms in displaced children as opposed to those able to maintain family and community connections. Children in these circumstances may find themselves without the protection and support of parents at critical junctures in their lives. Children are forced to act in more mature ways far earlier than normal development would dictate or allow. Displaced children are faced with exposure to war and violence that may have included seeing family members murdered. Less often, but even more horrific, some children have been forced into being the murderers of their family or conscripted to serve as child soldiers. Others find themselves either displaced to other countries or internally displaced and left to fend for themselves. Street children engage in survival tactics that include criminal activity and prostitution. In an effort to find a context for survival, the formation of youth gangs is increasingly evident, especially in societies where there is a lapse in government organization and control. More often than not, the children are the victims rather than the perpetrators.

Eisenbruch et al. note that one out of every 275 persons on Earth is 'of concern' to the United Nations High Commissioner for Refugees (23). More than 21 million are displaced within their own country, a 25 percent increase from the year before. Eighty per cent of refugees are women and children (24). Families face the added stress of high infant mortality rates, and resort where possible to culturally familiar coping strategies (15). War brings in its wake many unaccompanied minors who face life without their parents (25).

Many refugees live in camps that have become 'total institutions' with the attendant 'process of mortification' (26). Dependency is a feature in many camps and especially in

those that reproduce the authoritarian regimes from which the refugees escaped (27). Others are suffering from the multiple traumatic effects of torture. An outbreak of peace may mean fewer violent deaths, but entering the repatriation and resettlement phase of the cycle is yet another challenge for the disempowered (28,29).

Children Exposed to Conflict

The priority concern of international child and adolescent mental health is often the acute and continuing tragedies that involve youth in armed conflict or its aftermath. Eighty percent of the victims of war are reported to be children and women (30). The result of armed conflict is often displacement externally as refugees or asylum seekers or internally within settings of civil war. Thabet and Vostanis (31) investigated anxiety symptoms and disorders in children living in the Gaza strip and their relation to social adversities. Children completed the revised manifest anxiety scale (a questionnaire with yes/no answers for 28 anxiety items and nine lie items), and teachers completed the Rutter scale (a questionnaire of 26 items of child mental health problems rated on a scale of 0-2: "certainly applies", "applies somewhat", "doesn't apply"). Children reported high rates of significant anxiety problems and teachers reported high rates of mental health problems that would justify clinical assessment. Anxiety problems, particularly negative cognitions, increased with age and were significantly higher among girls. Low socioeconomic status (father unemployed or unskilled worker) was the strongest predictor of general mental health problems. Living in inner city areas or camps, both common among refugees, was strongly associated with anxiety problems.

Thabet et al. (32) examined the mental health profile among 322 Arab children living in the Gaza strip. Western categories of mental health problems did not clearly emerge from the factor analysis, the main difference appearing to operate in parents' perceptions of emotional problems in pre-school children. The authors warn of the need and establish indigenously meaningful constructs within this population and culture, and subsequently revise measures of child mental health problems

More attention is needed to culturally appropriate trauma therapy for children. Culture mediates the possible range of child responses (33). More than half of children exposed to war meet the criteria of PTSD (34), levels of stress were related to war exposure (35), the Impact of Event Scale (IES) persists after the war (36), and those who do are at higher risk of co-morbid psychiatric diagnosis (37).

“Child Soldiers” and Exploitation of Children

In the turmoil of some resource-poor countries, children are now being forced to become “child soldiers,” and others are drawn into the conflict as sexual slaves. Child soldiers reportedly suffer post-traumatic stress disorder (38-43). Somasundaram poses the painful question that, to prevent children becoming soldiers we need first to understand why children choose to fight due to push factors (traumatization, brutalization, deprivation, institutionalized violence, and socio-cultural factors) and pull factors (military drill from early childhood), as well as society’s complicity (44).

These horrific experiences place an as yet undefined burden on the psychological development of the victim. Understanding these experiences may shed additional light on the extremes to which resiliency may allow future healthy development, but perhaps more likely it will demonstrate the more permanent scarring evidenced in disturbed interpersonal relationships, distorted defenses, heightened aggression, reduced empathy, and self-destructive behavior. The data are not yet available to ascertain whether these young people evidence Post Traumatic Stress Disorder (PTSD) in the classic sense or whether, because of the early age of induction into the culture of war, they develop in a different way as a survival

response. Huge challenges face child mental health in helping to reclaim the lives of former child soldiers (45,46).

As for trafficking in children, worldwide, an estimated 1 million children are forced into prostitution every year and the total number of prostituted children could be as high as 10 million (47). Children are trafficked worldwide (48-56). The most urgent attention is paid to combating the trafficking (57), but the management of the psychological sequelae for the children will need to be given further attention. Non-governmental organizations have been taking a lead in developing programs for children and adolescents freed from trafficking. Another issue of concern is the trafficking of children for child labor and other forms of exploitation. The International Labor Organization has taken this up as a major concern (58). The psychological consequences of child labor are complex, involving distorted relationships of children to their families and the assumption of adult roles prematurely.

HIV/AIDS

In sub-Sahara Africa, Russia and parts of Asia, acquired immunodeficiency syndrome (AIDS) is now a pandemic. Special attention needs to be given to the consequences of AIDS on children and youth. The direct impact on children and adolescents is evident in India, other parts of Asia, and Africa, where sexual exploitation has led to a high incidence of youth infection with the inevitable outcome of death as a result of lack of available treatment. An estimated 1.5 million children less than 15 years old are living with human immunodeficiency virus (HIV) infection or AIDS (59). More than one-fourth of the young population in sub-Sahara Africa is infected. Among the 10 most affected countries, all in sub-Sahara Africa, approximately 6,000,000 children younger than the age of 15 years lost their mother or both parents to AIDS. Those infected but struggling with the illness face the prospect of having to adjust to declining physical and mental functioning and often living isolated lives. Thus, the mental health consequences of AIDS as a chronic and pervasive illness must be considered. There is the obvious concern with the direct effect of AIDS on the youth with manifestations of neuropsychological dysfunction including dementia, depression, and other disorders, which go largely untreated. These children and adolescents living as orphans or in stigmatized environments are vulnerable because of the loss of parent figures, malnutrition, and disenfranchisement from societies that have a stigmatized view of AIDS-affected and HIV-infected persons.

The mental health consequences are similar in the international arena and are well documented in U.S. studies (60). The caution in developing countries is that recognition of the neuropsychological consequences will be overshadowed by the totality of the devastation. This lack of recognition of depression, dementing illness, and other consequences of HIV infection may contribute to the continuing spread of the epidemic. As documented by Carlson and Earls (61), whether through social policy as evidenced in the Leagane children of Romania, or as the consequence of the pandemic of AIDS, the rearing of children in orphanages or in other situations that deprive children of appropriate stimulation and nurturance has potentially long-lasting consequences for societies.

Substance Abuse

Substance abuse in children and adolescents is a worldwide problem (62). In resource-poor countries, the problem is of no less importance than in Western countries and exacts a tremendous toll in terms of morbidity and mortality. Illicit drugs, and psychoactive substances not defined as drugs of abuse (such as khat, inhalants, and alcohol) are used by youth regardless of economic circumstance or religious prohibition. Remarkably, in some

Muslim countries, alcohol use and abuse are significant contributors to psychological morbidity. Khat or miraa (*Catha edulis*) is used extensively in East Africa and the Middle East. In Somalia, Ethiopia, and Kenya, the leaves of khat are chewed at all levels of society from about the age of 10 years (63). Khat may induce a mild euphoria and excitement that can progress to hypomania. In youth, khat use, especially if it is combined with the use of other psychoactive substances, may lead to psychosis.

Homeless street children are now found worldwide and appear particularly vulnerable to substance abuse and other high risk behavior (64). Senayayake et al. (65) studied the background, life styles, health and prevalence of abuse of street children in Colombo. Family disintegration was mentioned as the cause for life on the streets by 36%. Child labor was reported in 38%. 16% admitted to being sexually abused. 20% were tobacco smokers. Homeless children also are prominent among those groups using inhalants and who are caught in cycles of physical and sexual abuse often under the influence of drugs. Road accidents among those using drugs are also high.

Solvent and inhalant use is associated with poor economies. In South America, inhalant use is a dominant factor in the presentation of youth affected by psychoactive substances. In Sao Paolo, Brazil it is reported that up to 25% of children age 9 to 18 years abuse solvents (66). In the Sudan, gasoline is the inhalant of choice, whereas in Mexico, Brazil, and elsewhere in Latin America, paint thinner, plastic cement, shoe dye, and industrial glue are often used. Solvent use is also found among the aboriginal group in Australia and on Native Canadian reservations (67). In Mexico, three of every 1,000 people between the ages of 14 and 24 years use inhalants on a regular basis (68). These figures do not include two high-risk groups, the homeless population and those less than 14 years old, whose rates of inhalant abuse are much greater. Several community studies carried out in different parts of Mexico show that starting ages are as young as 5 or 6 years (68). Data suggest that the percentage of young people using inhalants decreases with age, as other substances such as alcohol and marijuana are substituted. Inhalant use decreases as educational level increases (69).

Wittig et al. (70) examine the hypothesis that drug use among Honduran street children is a function of developmental social isolation from cultural and structural influences. Data from 1,244 children working and/or living on the streets of Tegucigalpa are described, separating "market" from "street" children. The latter group is then divided into those who sniff glue and those who do not to identify salient distinguishing factors. An OLS regression of drug usage on these variables results in a model that explains 75% of the variance, where family relations, length of time on the street, and delinquency are the most important factors.

Forster et al. (71) studied the self-reported activities engaged in by children found wandering on the streets of Porto Alegre, Brazil, aiming to describe their drug abuse habits and practice of thefts or mendicancy. Regular abuse of inhalants was reported much more frequently by the street subgroup of children, reaching a prevalence of 40%. The practice of thefts was self-reported mainly by the children from the street group and only by the ones who used illicit drugs. These results show that very poor children might spend many hours of the day by themselves in the streets of a big city accompanied by children who are never under adult supervision. In spite of being alone for some hours a day and making friends with others who might use drugs, having a family and regularly attending school decreases the risk of delinquent acts and drug use

Violence and Abuse

Violence to and by children and adolescents now appears to be all too prevalent worldwide (72). Bullying, corporal punishment, victimization of parents by children and adolescents has now been reported worldwide. It is beyond the scope of this chapter to address all forms of violence and it will focus on specifics related to child abuse. Understanding child abuse requires understanding the vast cultural diversity in which children and adolescents live, and there is a need for greater attention to be given to possible country-specific interventions (73). What is termed abuse varies between cultures.

There are differences in cross-cultural definitions, incidence in developed and developing countries across continents, and measures that have been instituted to prevent and manage child maltreatment (74). The literature suggests that child maltreatment is less likely in countries in which children are highly valued for their economic utility, for perpetuating family lines, and as sources of emotional pleasure and satisfaction. However, even in societies that value children, some children are valued more than others (75). Ethnicity has been found to play a role in the epidemiology of pediatric injury (76). There is a diverse culture specific literature on abuse (77-79).

There are reports of structural models of the determinants of harsh parenting, for example, among Mexican mothers, where cultural beliefs play a major role in parenting within the framework of Mexican family relations (80). Changing cultural norms and attitudes in a given setting (e.g. Korea) can lead to children being at risk of abuse in the name of discipline or other seemingly appropriate parental or authority responses (81-83).Child abuse might increase in certain cultural groups as a result of cultural change rather than emerging from their traditions (84). Child psychiatrists with insufficient awareness about normative practices by parents, for example, dermabrasion or cao gao in Vietnam, (85))may jump to the conclusion that hematomas around the child's head, neck, or chest signals that the parents may have been wrong-doers who abused their child. A culturally competent child psychiatrist, while not dismissing abuse out of hand, would also evaluate the alternative possibility, that the parents, with the best interests of the child in mind, submitted him/her to ritual treatment, for which the bruising acts as a public signal to the community that the child has been unwell.

Shalhoub-Kevorkian (86) reported a survey of victims of sexual abuse among Palestinian Israeli girls aged 14 to 16 years. Data revealed that the girls' attitudes not only conformed to general findings on disclosure of sexual abuse but also reflected sociopolitical fears and stressors. Helpers struggled between their beliefs that they should abide by the state's formal legal policies and their consideration of the victim's context. The study reveals how decontextualizing child protection laws and policies can keep sexually abused girls from seeking help.

The legal implications of child abuse are affected by practices which may be normative in certain cultural settings, for example, female genital mutilation (87). Some ethnic groups may carry out procedures on their children as a sign of caring rather than as a punitive measure. For instance in Cambodian and Vietnam there are cases with facial burns associated with what was termed 'innocent cultural belief' (88). Thus, factors that lead to underreporting by physicians have included ethnic and cultural issues (89). Ethnographic data point to the importance of the social fabric in accounting for differences in child maltreatment report rates by predominant neighborhood ethnicity (90). There can be mismatches between the definition of child abuse between the culture of the professional and the culture of the

families (91). There is much to be learned about the use of cultural evidence in child maltreatment law (92).

Case Illustration

Child abuse is subject to the definitions of various audiences rather than being intrinsic to the act. There are a few studies concerning the effect of culture and context of the *professionals* (as opposed to the families) – as in a study of Palestinian health/social workers where people agreed on what was child abuse but disagreed on when it should be reported. The results indicated a high level of agreement among students in viewing situations of abuse as well as neglect as maltreatment. Differences were found in their willingness to report situations of maltreatment. An inclination was found among students to minimize social and cultural factors as risk factors and to disregard signs that did not contain explicit signals of danger as characteristics of maltreated children (93). Baker and Dwairy (94) examined intervention in sexual abuse cases among the Palestinian community in Israel. They suggest that in many collective societies people live in interdependence with their families. Enforcing the laws against sexual perpetrators typically threatens the unity and reputation of the family, and therefore this option is rejected and the family turns against the victim. Instead of punishing the perpetrator, families often protect him and blame the victim. The punishment of the abuser results in the re-victimization of the abused since the family possesses authority. Baker and Dwairy (94) suggest a culturally sensitive model of intervention that includes a condemning, apologizing, and punishing ceremony. In this way, exploiting the power of the family for the benefit of the victim of abuse before enforcing the law, may achieve the same legal objectives as state intervention, without threatening the reputation and the unity of the family, and therefore save the victim from harm.

Taxonomy and classification

Munir and Beardslee (95) are critical of DSM approaches and propose a developmental and psychobiologic framework for understanding the role of culture in child and adolescent psychiatry. Beauchaine (96) notes that developmental psychopathologists have criticized categorical classification systems for their inability to account for within-group heterogeneity in cultural influences on behavior. Appendix I of DSM-IV includes an 'Outline for Cultural Formulation' to assist in evaluating cultural context on diagnosis and treatment, but this has not been crafted for cultural formulations of child and adolescent psychopathology. Novins et al. (97) attempted cultural case formulations for four American Indian children and identified several gaps concerning cultural identity and cultural elements of the therapeutic relationship.

Culture and Assessment

There has been a growing recognition in child psychiatry in Western settings to consider cultural context in the assessment of psychopathology (8). A culturally competent framework for assessment in resource-poor countries, while sorely needed, has not been developed. A simplistic attribution to 'culture' of seemingly-bizarre symptoms that in fact represent treatable mental illness would deflect energy from the development of effective treatment and prevention efforts. At the same time, an understanding of the cultural construction of major psychiatric disorders (including culture bound disorders affecting young people) would minimize inaccurate diagnoses. This view has to be balanced with the understanding of less severe psychopathology, in which the observation of Neki (98) holds true, that ethno-dynamics determine psychodynamics. In India, where the cultural ideal of an

independent adult is not an autonomous adult, dependency is inculcated from childhood through a prolonged dependency relationship between mother and child. Dependency has a negative, pejorative connotation in Western thought, which is not so in the Indian context. The fostering of dependency is coupled with a high degree of control, low autonomy, and strict discipline, enforced within the broad framework of the family system. When this is identified by clinicians as representing a degree of pathology, decreased emphasis on the expression of thoughts and emotions in children could explain the greater preponderance of neurotic, psychosomatic, and somatization disorders (99). Thus, cultural context influences the definition of normalcy or disorder. It proscribes the values and ideals for the behavior of individuals, it determines the threshold of acceptance of pathology, and it provides guidelines for the handling of pathology and its correction (100).

Cultural issues also affect assessment because of problems with cultural validation of instruments. A German study showed problems in applying the United States factor structure of the Conners Parent Rating Scale (CPRS), with lack of correspondence of the impulsiveness/hyperactivity scale (101). A Greek study of the Conners-28 teacher questionnaire in a Greek community sample of primary schoolchildren found that the factor structure was similar to that originally reported from the US, with high discrimination between the referred and nonreferred sample, especially for the Inattentive-passive scale (102).

Rey et al. (103) noted the lack of simple, reliable measures of the quality of the environment in which a child was reared which could be used in clinical research and practice. They developed a global scale to retrospectively appraise the quality of that environment and found good interrater reliability with clinicians from Australia, Hong Kong, and the People's Republic of China. Goodman et al. (104) developed a computerized algorithm to predict child psychiatric diagnoses on the basis of the symptom and impact scores derived from Strengths and Difficulties Questionnaires (SDQs) completed by parents, teachers and young people. The predictive algorithm generates ratings for conduct disorders, emotional disorders, hyperactivity disorders, and any psychiatric disorder. The algorithm was applied to patients attending child mental health clinics in Britain and Bangladesh. SDQ prediction for any given disorder correctly identified 81-91% of the children who had that diagnosis.

Epidemiology

Determining the epidemiology of childhood mental disorders in Western society is a challenge. On the international scene, the ability to determine the precise magnitude of mental disorders is even more complex. Reporting systems are inadequate, the definition or recognition of disorders varies or has variable interpretations, and the cultural component of what constitutes a disorder is only now being more fully appreciated by epidemiologists and researchers. Of significance in resource-poor countries is that any measure of mental disorder takes place against a background of child and adolescent mortality and morbidity that makes the epidemiology of psychiatric disorder not only inaccurate, but often of a lower priority. Thus, in studying the epidemiology of psychiatric disorder in children and adolescents in resource-poor countries, it is important to define not only the prevalence and incidence of the disorders, but also the degree of impairment and burden of disease. No single study or consistent set of independent studies on the epidemiology of child and adolescent disorders since 1980 can be identified as definitive or relevant across societies. Those studies carried out in the 1980s reflect the deficiencies noted earlier and certainly do not reflect the current realities of the countries from which the data were reported (105,106). Weiss has defined a new epidemiological approach combining qualitative study with classic epidemiologic

methods (107-109). This new "cultural epidemiologic" approach has not yet been applied to child and adolescent mental disorders but holds the promise of gaining a more satisfactory understanding of the nature and extent of child and adolescent mental disorders worldwide.

Until now, when one has been faced with the realities of resource-poor countries, as noted, there is the danger of becoming a diagnostic nihilist in attempting to understand mental disorders in youth. However, for example, responsible investigators in Western Ethiopia clearly identified disordered mental functioning that meets a set of defined criteria (110). There is clear evidence that depression, psychosis, and mania can be defined and treated. The problem arises when one considers the context for the presentation of child and adolescent mental disorders. Is a hallucination during a ritual a disturbance in need of treatment? If the hallucination persists, should it be treated? What diagnostic label is appropriate? Giel and Van Lujik (111) found, in the pre-HIV/AIDS era, and counter to prevailing belief, that mental disorders were diagnosed more frequently than infectious diseases in the health centers in Africa that they studied. Until reporting is adequate and accurate, it cannot be assumed that the current state of mental health in the developing world actually supports the too prevalent minimalist and optimistic view. This sense is supported by the finding from WHO studies of primary care clinicians that showed that many patients seeking care had mental disorders, and their communities were aware of the problem (112). In the current era, Omigbodun (113) documented the psychosocial problems in a child and adolescent psychiatric clinic population in Nigeria. 62.2% of new referrals to the clinic had significant psychosocial stressors in the year preceding presentation. Problems with primary support, such as separation from parents to live with relatives, disruption of the family, abandonment by mother, psychiatric illness in a parent and sexual/physical abuse, occurred in 39.4%. Significantly more children and adolescents with disruptive behavior disorders and disorders like enuresis, separation anxiety and suicidal behavior had psychosocial stressors when compared to children with psychotic conditions, autistic disorder and epilepsy

Prevalence

Although it is interesting to consider epidemiological reports of more esoteric disorders, these are a distraction from the significant burden of disease that needs to be addressed in the mainstream of care. In most studies, the methodological inadequacies and other constraints do not permit these studies to be of use for program planning or needs assessment. However, most countries today have access to appropriate epidemiologic study guidelines, and it is a matter of setting a national priority and allocating resources to ascertain the data. For example, a study in India by Malhotra (114) used a sophisticated three-stage assessment of the epidemiology of disorders in school children aged 4 to 12 years. In this study, assessments by teachers, parents, and clinicians were compared. The teacher assessment on the Rutter B scale, a generally accepted measurement instrument, had a low concordance rate with the clinical assessment. When children tested positive on both the teacher and parent assessment, there was a diagnostic rate of 92.3% on the clinical assessment. The evidence pointed to a prevalence rate of psychiatric disorder ranging between 7% and 20%. The diagnostic possibilities included enuresis, mental retardation, and epilepsy, among others. Overall, the most conservative estimate of severe psychiatric disorder in India is 10% of the population younger than age 14 years, representing 35 million children (100).

Giel et al. (115) demonstrated in four countries (Sudan, Philippines, Colombia, and India) that between 12% and 29% of children aged 5 to 15 years showed mental health problems. The types of disorder identified in these resource-poor countries were reported as being no different from those encountered in industrialized countries. However, recognizable

diagnoses were not given in the article. Mothers readily reported the symptoms that made possible the diagnosis of disorders. Thabet and Vostanis (116) report a pattern of anxiety symptoms and disorders among children living in the Gaza Strip comparable to previous epidemiologic research in Western societies. There were high rates of anxiety disorders and school-related mental health problems. Thabet and Vostanis find the same prevalence rate (21%) of anxiety-related disorders as do Kashani and Orvaschel (117). Thabet and Vostanis (116) state that their findings do not support the commonly held belief that in non-Western societies anxiety and other mental health symptoms are predominantly expressed through somatizing symptoms. Citing Nikapota they state that child mental health symptoms do not differ significantly across cultures, and culture-specific mental health disorders are rare.

Most recently, Tadesse et al. (118) report a prevalence in Western Ethiopia of childhood behavioral disorder of 17.7%. The behavioral disorders are more frequent in boys than in girls. These latter data were gathered with a version of the Reporting Questionnaire for Children developed by WHO. Studies of Hackett et al. (119) and Bird et al. (120) find an excess of male patients with externalizing disorders. The findings reflect the Western view of a male predisposition to externalizing disorders. These views of comparability with Western epidemiologic data are at odds with older studies and may reflect new social and economic realities.

What of the disorders that now occupy considerable attention in developed countries such as attention deficit hyperactivity disorder, autism, and anorexia nervosa? The diagnosis and treatment of these disorders highlight both a weakness and a strength of having an international perspective. The recognition and labeling of disorders come as a result of improved international communication. However, the process of assessment must take into account a host of cultural as well as formal diagnostic criteria and this is too often ignored. Cultural concepts of what is normal or abnormal and how parents perceive the presence or absence of a diagnosable disorder (106) are essential to consider. In the case of eating disorders, there is clear evidence that the incidence may be affected by Western influences (121). In the diagnosis of attention deficit hyperactivity disorder (ADHD) pharmaceutical companies are now a primary source of both public and professional education and they often focus on the use of the diagnosis for the purpose of implementing a pharmacological intervention. This trend may provide an indirect incentive for the overdiagnosis of disorders such as ADHD and bipolar disorder. The understanding of the influence of increased public education on diagnosis requires further study. Fayyad et el. (122), discussing the development of systems of care in resource-poor countries, focuses on ADHD and the development of a comprehensive system of care around it in Lebanon. In a study of adolescents in Bahrain diagnosed with Adjustment Disorder, al-Ansari and Matar (123) examined the type of life stressors that initiated their referrals to a child psychiatry unit. Disappointment in relationships with a family member or with a friend of the opposite sex was found to be the main stressor. Eating disorders classically are rare in resource-poor countries such as India (124), but anecdotal evidence suggests that with globalization and migration the rates are increasing (125-128). Autism is reported around the world, including in resource-poor countries (129-131), and with a cross-national consistency (132,133). However, high rates of autism, almost 200 times higher than in the general population of children, have been reported among boys born in Sweden to mothers born in Uganda (134,135).

Specific Mental Disorders

Post-traumatic Stress Disorder

It is a challenge that as mental health professionals we know so little about the consequences of exposure to natural disaster and armed conflict on long-term healthy mental development. In relation to adults it is clear that armed conflict leads to persistent negative functional consequences from exposure to trauma. As for children and adolescents, there are conflicting views on the impact of the traumas noted earlier (136-139). The resiliency of children over the long term seems to be a consistent dominant finding, but individual investigators identify specific consequences, with depression, externalizing behaviors, and PTSD as evident consequences (22). Diagnostic status does not relate to functional status according to Sack et al. (140). Sack et al. (139) not only show persistence of PTSD but also demonstrate a sometimes delayed onset of symptoms. Even in those youth demonstrating delayed PTSD, symptoms of depression diminished over time. Terr (141) demonstrated persistent effects on children from trauma, with lasting functional deficits. Studies related to children from Kuwait (142) and Iran (143) show the persistence of PTSD. Nader et al. (144) report moderate to severe PTSD in 70% of Kuwaiti children after the Gulf War. Thabet and Vostanis (116) found in the Gaza Strip that the prevalence among children ages 6 to 11 years of at least mild PTSD is 73%, and 39% presented with moderate to severe symptoms. Ahmad (145) reports that 25% of displaced Kurdish children had evidence of PTSD, and Weine et al. (138) found similar rates in Bosnian adolescents who moved to the United States during the war. Hussain et al. (146), reporting on the impact of the siege of Sarajevo, noted that it is not the exposure to sniper fire, but rather the loss of a family member and deprivation of food, water, and shelter that have a severe adverse impact on children. The clinical manifestations of the trauma are avoidance and re-experiencing symptoms. Of concern, is the implementation of clinical interventions that may inadvertently lead to an exacerbation or prolongation of symptoms: for example, the use of “ventilation” and re-telling of the trauma through various means has been shown to have negative effects (147), wheras re-establishing families and returning to normal routines including school attendance has a salutory impact.

Conduct disorder and delinquency

A study of the adjustment of children in Sri Lanka using the Strengths and Difficulties Questionnaire (Goodman) with parent, teacher and child informants, found problems consistent with other international studies of child mental health. Compared with Muslim and Singhalese children, Tamil children were rated as more hyperactive, with more emotional symptoms, conduct problems and total behavioral difficulties. Relationships between behavioral adjustment and Tamil ethnicity and Hindu religion could be associated with longstanding ethnic conflict in Sri Lanka and confirms the need for development of child and adolescent health services in civil war-torn countries such as Sri Lanka (148).

A descriptive survey of Flemish delinquent adolescents found significant difference between ethnic groups on self-report scores (149). Tramontina et al. (118) evaluated the association between DSM-IV conduct disorder (CD) and school dropout in a sample of students from the state schools in the capital of the southernmost state of Brazil. The prevalence of DSM-IV CD was higher in the school-dropout group than in controls. The odds ratio for school dropout was higher in the presence of DSM-IV CD, even after controlling for potential confounding factors such as family structure and income. A cross cultural study of delinquency among West Indian boys (151) had comparable findings.

Depression

Childhood depression is gaining prominence worldwide (152). A cross-cultural evaluation of depression in children in Egypt, Kuwait, and the United States (121) showed similar clinical patterns. Depressive and anxiety disorders should not be overshadowed by the attention currently being given to PTSD in developing countries in the aftermath of natural disasters and post-conflict situations.

The obverse side of childhood depression – and pertinent in resource-poor countries, is the depression that results with the death of a child. Few losses hurt as much as the death of a child, no less so in countries with high infant mortality rates. The constant threat that a child may die will influence the climate of parenting and family life. The Chagga regard childhood malnutrition, or *kuvimba*, as a sign of displeasure by the ancestral spirits (154). Howard and Millard (155) point out that as perceptions of young children have changed, there has been a diminution in the rituals to do with birth practices, ancestral spirits and the child. Serious childhood illnesses continue to raise suspicions, however, of sorcery as a sign of community disharmony. Spells can be cast on children by hiding or swallowing some of their body substances such as hair or feces, or by introducing some foreign substance into the child's body. The threat of infant mortality (which tends to be consecutive (156)) may even change the cultural concepts of infancy, as among Canadian aboriginal children, where high infant mortality rates contributed to a delay in conferring personhood on the child (157). Scheper-Hughes (158) argued that maternal detachment and indifference towards their infants judged too weak to survive may lead to sick babies being left without attention.

Suicide

Suicide in youth is a pervasive world mental health problem. In Western cultures, suicide is overwhelmingly associated with defined mental illness. Suicide is the second leading cause of death for American Indian and Alaska Native youth (159). Elsewhere in the world, it may be very difficult to identify the mental illness associated with the suicidal act – and in the face of overwhelming helplessness, suicide may appear from the perspective of the protagonists as the only way out, with no clearly labeled mental illness. Studies of suicide in the West have focused on risk factors associated with cognitive distortions, substance use, and familial factors (160). In trying to assess the high rates of suicide in some resource-poor countries, it appears that the balance in determining suicidal risk may rest with environmental stressors and the perception of "no way out." Expectations may often be more of determinant of suicidal angst than reality (161). According to one view expressed by Murthy (162), the traditional protective effect of religion in certain cultures seems not to operate among the younger generation

Chan et al. (163) consider suicide in China as a response to change due to globalization, in which 'Chinese' values are more closely identified with the global culture. The high suicide rate is thus not seen as a reflection of psychiatric disorders but of socio-cultural factors. It seems more apparent that suicide is viewed by those without demonstrable mental illness as a solution to social and personal dilemmas that bring with them thwarted expectations for a happy or successful life. For example, from this perspective, in India and in other resource-poor countries, the focus of the suicidal individual is not on achieving some exalted goal, but rather on being able to have enough of a dowry to be married, to not be isolated because of rape, or to be successful in passing a school advancement examination. This relative alteration in emphasis is important in the consideration of intervention strategies and in the training of workers to perform triage and to treat suicidal children and adolescents. A survey of adolescent health in nine Caribbean countries identified risk and protective factors predisposing to suicide attempts (164). In Hong Kong, amid the impressive high-rise

buildings and fancy stores, reside families barely able to subsist. In this context of economic hardship, the result in part of massive economic adjustment in the Far East, the phenomenon of family suicide exists. Chan reports that families come together and, in a well-planned manner, seal themselves in their small apartments and light a charcoal heater (165). In a relatively brief time, the members of the family are asphyxiated. This has become an acceptable form of suicide in that the bodies remain intact and have an attractive appearance because of the monoxide poisoning. To the extent that it has been possible to determine the psychological state of the family before the suicides, major psychiatric disturbance has not been reported.

Case Illustration

In India, four sisters aged 16 to 24 years committed suicide by hanging after an evening during which they bought sweet cakes and samosas and played word games. The context was that they were part of a once prosperous family in which the father died of tuberculosis for lack of medical treatment. Now they periodically were without sufficient food, but with a mother too proud to ask for help. This family was socially isolated because of parental marriage across religious lines, and they had suffered an unexpected financial downturn as a result of a road-widening project that took their once fertile land. Suicide rates in India, although less than the international average of 16 per 100,000, have been steadily rising. Psychiatrists believe this is in part a result of the accelerating pace of social and economic change. Whereas the biggest risk factor in the West is mental illness, studies in India have consistently found that the dominant risk factor is a combination of social and economic strain. Farmers in debt may take pesticide, and ostracized women who are victims of the dowry system in economically stretched circumstances might immolate themselves (166).

Disabilities, Mental Retardation and Epilepsy

Disability – whether physical or mental – is all too common in resource-poor countries, especially those post conflict. In Cambodia, for example, between 2 to 3 per cent of the population, or about one out of every 40 Cambodians, have physical disabilities (including 50,000 landmine survivors, many of them young people, 60,000 with paralysis from polio, 100,000 who are blind, 120,000 who are deaf, 102,000 to 178,500 with mental retardation, 20,400 to 40,800 people with severe mental disorders), 154,000 to 408,000 people with epilepsy) (167).

Mental retardation and epilepsy are major disorders that often dominate the services of child mental health and pediatric professionals in resource-poor countries. In the 1980s, prevalence rates in resource-poor countries were estimated to be in the range of 8 to 12 per 1,000 for children aged 3 to 10 years (168-170). Mental retardation and epilepsy are the most common mental disorders in India (171,172). The rate of serious mental retardation in some resource-poor countries ranges from 5 to 16.2 per 1,000 population (173), significantly higher than the rate in the West. Cerebral palsy and postnatal causes of mental retardation are much more common in transitional societies than in developed countries. Untreated epilepsy limits a person’s potential to participate in society. Unfortunately, although the cost of medication is relatively low, access to care is often limited. The care of the mentally retarded varies widely in resource-poor countries. In some countries, special effort is made to provide for productive lives with meaningful vocational education, especially in agrarian economies. All too often, the moderately and severely retarded are housed in minimal care institutions where premature death and illness are common.

Kim and Kumar (174) describe *Dousa-hou* as a Japanese psychological rehabilitation method widely used in Japan for children with mental retardation, cerebral palsy, and autism. The focus is to improve bodily movements and posture as well as to introduce social support to patients and their first-degree relatives. Analysis showed mothers got more social support interacting with their child's trainer and supervisor during *Dousa-hou*. Trainers were more interactive than mothers in the Indian group, followed by the Japanese and Korean cultural groups.

Children with disability such as epilepsy are among the most marginalized in many resource-poor countries. In Cambodia, for example, they have limited access to education, vocational training, employment and income-generating opportunities and other services. Childhood epilepsy is viewed traditionally as caused by the attack of the preceding mother from the previous incarnation of the infant, and treatment may be sought by parents from the *kruu* or traditional healers to ward of her attacks. The children may be cared for in the Buddhist temple, or kept indoors out of the eyes of neighbors.

Services

The World Health Organization through the Atlas project has developed the first objective profile of resources for services related to child and adolescent mental health (175). The findings confirm the worldwide gap in services to address child and adolescent mental health (176). The gaps exist in both resource poor and resource rich countries. The lack of services is tied to insufficient and unstable financing, lack of trained professionals, and lack of policy to support the development of child and adolescent mental health services.

Resource-poor countries lack the child mental health personnel to mount large-scale programs of treatment with fully trained staff members. The prospect of training large numbers of child mental health workers remains a continuing goal, whereas the training of child and adolescent psychiatrists to meet the potential need is beyond the realm of possibility. In the interim, what can be done to provide a way to intervene for the promotion of child mental health? Obviously, one focus is on developing prevention programs in general health and education systems. Second, training primary care practitioners from numerous disciplines is needed to provide basic child mental health services. Basic assessment and treatment are possible, with triage of the most severely disturbed.

McKelvey et al. (177) illustrate the differing priorities for child psychiatric services in Vietnam, where there is a focus on infectious diseases and malnutrition, and by cultural, economic and manpower factors. Treatment is reserved for the most severely afflicted, especially patients with epilepsy and mental retardation. Specialized care is available in only a few urban centers. In rural areas treatment is provided by allied health personnel, paraprofessionals and community organizations.

In some countries, the lack of child mental health personnel has stimulated some remarkable efforts to train persons from diverse backgrounds to be effective in identifying and intervening to ameliorate child mental health problems. In Alexandria, Egypt, child counselors have been trained to develop sophisticated interventions in schools (178).

Program Illustration

In Alexandria, the Department of Community Medicine has supported the development of a cadre of school counselors. These counselors come from the ranks of volunteers, social workers, and psychologists. Without prior child mental health training, the workers are provided with course work on common child mental health

problems and then are supervised in field placements. The counselors work with parents around children identified by both the school and parents as having some type of behavioral problem. They also serve as contact points for the school, parents, or pediatricians to bring children with more severe behavioral disturbance to the attention of the few fully trained mental health professionals.

Leaders in child mental health programming in resource-poor countries are emphatic when faced with the reality of program implementation that Western models of care by specialists are neither feasible nor desirable. Indigenous methods and models of care need to be developed that are not dependent on specialists. Conversely, the development of these models that use parents, teachers, pediatricians, and others can be informed by the best thinking of child psychiatrists and other specialists. This has led to an emphasis on the training of primary care practitioners. Furthermore, short-term, focused training in specific areas related to diagnosis or intervention can be provided by specialists or through specialized child psychiatric centers that have a broad regional or national area of responsibility.

The development of child mental health training for primary care practitioners is well established in many sites, but the WHO Atlas documents that the utilization of primary care providers falls far short of the goal in both developing and developed countries. Murthy (7) describes the use of primary health care providers in resource-poor countries. In India, with 1.5 billion people, there are only 5,000 mental health providers, of whom only a fraction are psychiatrists; 35,000 psychiatric beds, and a dearth of emergency services. The primary care provider, when adequately trained, is a valuable and essential point of contact and treatment for the mentally ill. In India, it has been demonstrated that primary care providers can provide a level of professional care that reduces morbidity and mortality. However, without appropriate training, primary practitioners have been shown to have a poor record of recognizing mental disorders. Giel et al. (179) report in their study in resource-poor countries that primary care practitioners identified only 10% to 20% of the disorders that the researchers were able to diagnose. WHO has devoted considerable efforts to the development and distribution of training manuals to aid primary care practitioners in the recognition of mental disorders (180,181).

Moreover, India has developed the *anganwadi* system to provide basic nutrition and educational support in villages. This is both an appropriate preventive intervention and a way to assess youngsters presenting with disorders (182). The *anganwadi* system focuses on providing essential services to very young children. Like Head Start, the program provides nutrition, basic education, socialization, and a venue for more specialized intervention for children perceived to be at risk or in need of additional services (183). There must be a concern in the development of these indigenous systems of care that not too much dependence be placed on family structure and support at a time when urbanization and industrialization are eroding the traditional family structure. With the absence of security, and often living at a subsistence level, the new nuclear family faces previously unknown challenges and may be particularly vulnerable over this and the next generation.

Some programs are international in scope. For instance, WHO, as part of its Program on Mental Health, has fostered the use of life skills education (184). The goal of the Life Skills Program is to foster psychosocial competence. For children and adolescents, the Life Skills Program is taught in schools. The program itself as promulgated by WHO is based on the social learning theory of Bandura (185). Many similar models are operative throughout the world. A training the trainer component affects the overall resource of a community to provide for the mental health needs of some children and adolescents who are at risk. Among the obvious limitations in the developing world are the absence of universal education and the

capacities of the teachers to go beyond essential educational tasks. Kapur *et al.* (186) demonstrate that the training of teachers as counselors was effective in India.

The prospect for the future of child mental health practice in resource-poor countries is tied to economic growth, health literacy, and reduction of stigma. The creative efforts to develop programs to reach children and adolescents in resource-poor countries need to be supported. Child and adolescent psychiatry will remain a scarce resource to be used in ways that will have a duplicative impact. This means that the training of volunteers, the training of peers, the support of family intervention programming, and the use of community-based early intervention need to be the focus of attention. Kim (187) proposed a curriculum guideline of cultural competence for child and adolescent psychiatric residencies. These guidelines stress ethnogeneric and developmental perspectives, which can be expanded further to include ethnospecific issues depending on the needs of each training program.

The notion of a continuum of care as advocated as a goal in developed countries is but a fantasy in the developing world, where there remains a reliance on in-patient care for the most seriously disturbed, and where outpatient care is often sparse. In some developing countries the Western model of managed care and the institution of various insurance schemes are underway. Unfortunately, the negative consequences of these aspects of care systems are too often not recognized. In some countries the introduction of insurance has had the unintended consequence to reduce access for uncovered populations and led to flight of health professionals into the "private sector."

Research

Earls and Eisenberg (188) highlight three areas for enhanced research activity in relation to child and adolescent mental health. First is research to understand how the changes in contemporary society are reflected in the prevalence and incidence of mental disorders. Second is research to enhance the understanding of how different child-rearing methods affect normal and deviant behavioral and emotional development. Third involves research on the design and delivery of mental health services. The foregoing illustrates the dilemma of attempting to understand patterns in non-Western, developing countries, of child rearing or assessment of pathology through a Western lens. Mohler (189) describes and discusses the major challenges in cross-cultural research on child mental health. Nelson and Quintana (190) present strategies for designing and conducting qualitative investigations, address ethical issues involved in conducting qualitative research with minors. International child development and mental health studies often call for a mixed-methods approach (191).

Eisenbruch (192) has defined a template for the steps needed to ensure cultural competence in research, namely cultural competence in: community engagement; communicating with research subjects; design; cross-cultural validation of research instruments; sampling; calibrating diversity variables; demographic variables measured in datasets; research ethics; data collection techniques; data processing and analysis; and dissemination and action. Culturally competent community engagement by the researcher, for example, depends on (a) building community partnerships; (b) developing interventions that are acceptable and relevant; (c) promoting successful recruitment, participation, and retention of participants; and (d) developing a diverse, cohesive, and committed research team and effective managerial information support systems. International child psychiatry research program should pay attention to participation from the perspective of community members (193-195). International child psychiatric research should avoid sampling barriers among culturally diverse communities to do, for example, with lack of tolerance of diverse groups, social stigma, concern for issues of confidentiality, and fear of exposure because of possible threats to security (196). The research should avoid the use of instruments developed in one

culture transferred to another given the cultural differences in the interpretation of certain items. The research should avoid definition of diversity with only a single variable. Cultural, racial, religious and immigrant groups are not homogeneous. For example, any 'one' population include native-born, migrant, and immigrant peoples with distinctive national origins and regional settlement patterns, and varied and complex demographic structures. Data collection should be clear about descriptions of ethnic or racial measurement and reasons for including or excluding clearly defined populations. The research should be open to innovative recipes for data collection, for example, as proposed by Roszak (197) with clarity about (1) who provides information; (2) when data are collected; (3) which racial and ethnic categories are used – all hospitals should use standard racial and ethnic categories; (4) how data are stored; and (5) responses to patients' concerns.

Fontes (198), drawing in his experiences conducting research on sexual abuse in a shanty town in Chile and with Puerto Ricans, examined ethical issues in cross-cultural research on family violence. It was emphasized that special attention needs to be given to informed consent, definition of the sample, composition of the research team, research methods, and potential harm and benefit. Nikapota (1) underscores the importance of determining "culture-appropriate" criteria to permit consistency in diagnosis. In doing research, it is important to consider the characteristics of the interviewer as well as the informant. Munir and Earls (199) articulate a set of ethical parameters for research that must be considered in doing research among children and adolescents of resource-poor countries. To apply a different standard justified by the difficulty of implementing protocols would violate the very support of a rights framework so essential for progress to be made on behalf of children in resource-poor countries.

An area of great interest is the development of assessment tools that incorporate the diversity of cultural parameters. Increasing numbers of instruments have been translated and back translated for use in cross-cultural studies. Instruments exist for the assessment of depression, anxiety, PTSD, quality of life, and other conditions. It remains for there to be a sufficient body of cross-cultural research with modern standards for the conduct of the research that yields information on the reliability and validity of the instruments in their revised versions. Few instruments meet an agreed standard for use across all cultures in their current form.

As described by Earls (200), compulsory schooling leads to the need to understand the impact of learning disorders better. The appropriate diagnosis and remediation of these disorders are first-order priorities in countries where technologic advance places a premium on knowledge acquisition and use. As yet, research in this area has not been implemented in resource-poor countries, but the pressure to implement such studies is mounting.

Research into the understanding of the differential impact of child rearing methods should be an area of collaborative inquiry between those interested in mental health and those concerned with the role of women and the family in evolving societies. It is not evident that any one method of child rearing is superior to another. Perhaps developing and developed societies can learn from one another about the optimal methods for child rearing in the presence of the evolution of individual societies. The experience with the effects of urbanization, industrialization, changing roles of women, and increased survivorship of children in developed countries may form the basis for translation into the programs for resource-poor countries. Conversely, the healthy development of youngsters growing up in adversity in resource-poor countries may provide information on how to enhance the understanding and to develop new interventions for children at risk in developed countries.

Attention needs to be focused on the important developments in global and

international child mental health that are published in peer reviewed journals languages other than English. A mechanism is needed to ensure that these key findings are not lost to the English-speaking world (201).

Prevention

It appears that prevention of mental disorders is the way to approach the problem of reducing the toll of mental illness in resource-poor countries. Many of the mental health issues that need to addressed are inextricably related to contextual issues, as noted earlier. One area too often overlooked in considering a way in which mental health problems can be prevented is through the overall reduction in malnutrition. The effect of malnutrition in societies impacts both the child directly and the parent who cares for the child. Both lead to significant mental health consequences that are preventable. The consequences from malnutrition can be delayed cognitive development, but also more subtle behavioral manifestations with attentional problems and learning disabilities (183,202, 203). Some studies suggest that the behavior disorders associated with malnutrition are secondary to impaired maternal capacities and not to the malnutrition itself, because malnutrition does not appear to contribute to behavioral disturbance later in life (204,205). Thus, mental health professionals working in the international arena must be mindful of this issue and consider it in their assessment of mental functioning, as well as advocating for proper nutrition as a preventive measure (206). There is an opportunity to reduce some behavioral and cognitive problems through a reduction in malnutrition.

Maternal depression associated with malnutrition, ill-health, social deprivation, abuse or other stressors affects the child and adolescent as well as the mother. This too is a preventable cause of childhood mental disorder, as demonstrated by Beardslee et al. (207).Using a family-based approach, Beardslee and colleagues sought to reduce risk factors and enhance protective factors for early adolescents. They demonstrated that providing parents with information about their affective state, equipping them with enhanced communication skills, and fostering parent-child dialogue led to an improvement in children's self-understanding and children's depressive symptomatology. This program is now being replicated in Finland, Costa Rica and elsewhere (208).

Life skills education promoted by the WHO is the backbone of prevention programming in many resource-poor countries (209). Life skills' training is provided in the context of the school curriculum as a program to enhance psychosocial competencies. The training focuses on basic, generic skills such as decision making and problem solving, creative and critical thinking, communication and other interpersonal skills, self-awareness and empathic skills, and coping with stress and with emotions. The aims are to promote mental well-being and to enable children to take more responsibility for their lives and feel more effective (210).

The WPA Presidential Global Program for Child Mental Health identified school drop out as a major issue in both developing and developed countries. Intervention to prevent drop out was considered to be an important preventive strategy related to child mental health. The Program conducted research on school dropout and prepared materials for use by clinicians and educators (211). The Global Program has produced other materials to support preventive intervention in resource poor countries (212)

Systemic Issues

Throughout the world, it is rare to see child mental health being incorporated into national health policy (213). In many countries, developed or developing, no coherent health policy exists that would provide a framework for program development. In countries with a health policy, child mental health rarely rises to a prominent position. Until child mental

health becomes integrated into health policy, stable budgetary support for child and adolescent mental health programs will not be realized.

Advocacy for child and adolescent mental health is evident throughout the world, but competition with other interests often forces the issue off the policy agenda. When crises involve children, such as child soldiers in the Sudan, or female genital mutilation, the issue of child mental health, for a time, gains the spotlight. Unfortunately, the advocacy and concern diminish with time and rarely find a sustaining constituency.

Nongovernmental organizations play an important role in promoting child mental health, in disseminating information, in providing a forum for professional exchange, and in advocating for specific causes. The constituent base of these organizations differs, but they generally have broad representation and provide an opportunity for interested persons to learn more about specific topics or develop ideas in a context of knowledgeable individuals. Many of the nongovernmental organizations have affiliated regional organizations that permit ongoing local involvement. National organizations have often taken leadership roles in advocacy efforts and crisis response. The following are some of the more established international non-governmental organizations focused on child and adolescent mental health: the International Association for Child and Adolescent Psychiatry and Allied Professions, the World Association for Infant Mental Health, the International Association for Adolescent Psychiatry and Psychology, and the World Federation for Mental Health.

The lack of trained individuals in resource poor countries and the maldistribution of professionals in developed countries is a significant impediment to the development of child and adolescent mental health services. The limitation for program implementation is the availability of trained persons for leadership and "training of the trainer." Further, the lack of individuals within non-Western societies leads to the too facile adoption of interventions and strategies that do not fully appreciate local culture and the appropriate utilization of available resources. Further, there is the need for these programs to be able to access tertiary diagnostic and treatment services for those with manifest psychiatric disorder. Efforts to support training are now ongoing through many non-governmental and governmental efforts. The training of a sufficient number of individuals to implement appropriate, accessible care will be an ongoing challenge.

Lessons to Be Learned

It would be wrong to focus only on the areas where it appears that more could be done to enhance child and adolescent mental health services. Western mental health professionals and program developers can learn from the programmatic necessities and innate capacities of individuals and families in resource-poor countries.

Family participation in the care of the mentally ill or retarded children in resource-poor countries is impressive by any standard. The acceptance by communities of the special needs of affected families is often dramatic. Likewise, the willingness and ability of families to care for children, including the appropriate use of medication, for children with epilepsy and other disorders challenge Western concepts of continuity of care and the role of providers.

Finally, the West has flirted with the enhanced use of primary care providers in the delivery of mental health services, but in resource-poor countries, necessity has led to impressive models for the training of primary care practitioners, as noted earlier. This is true in many countries, notably India and Thailand. Primary care training for specific mental health interventions is also part of a WHO strategy.

Conversely, there is a global trend toward the imposition of managed care on mental health services. This is occurring in countries, such as China and Eastern Europe, which have hardly met their child and adolescent mental health needs. The need is felt to control the cost of mental health services. Perhaps uncritically, economies throughout the world are adopting managed mental health care. From a Western perspective, it is obvious that although all mental health services suffer in a managed-care environment, child and adolescent mental health services are often most vulnerable to reductions and the use of the lowest-common-denominator service. Research into managed care and health services has not had the beneficial impact of stimulating the development of some innovative systems of care, but unfortunately the investment needed to foster these systems of care and the social network needed to provide “wrap-around” services do not exist in resource-poor countries. It remains to be seen whether traditional systems of care can be integrated into a meaningful continuum.

Emerging issues

The impact of globalization and political change underpins much of this chapter. Globalization and modernization bring new challenges to the attention of child and adolescent mental health professionals. In Japan, changes in society associated with rapid economic development are affecting the mental health of children and families, with concern about levels of school refusal, bullying, suicidal behavior, and delinquency (214). Lewis et al. (215) note the impact of the transition of the Eastern European countries from communist to democratic societies on children's mental health, both positively and negatively. On the positive side for child mental health is growing support for a democratic process within the family, the depoliticization of mental illness, the passage of laws assuring basic children's rights, services for and public awareness about child abuse, reforms in education, the proliferation of mental health clinics and support centers, and the resumption of training of mental health professionals in many countries. International adoption, the use of telepsychiatry in the developing and developed world, the role of industry and the for-profit sector in program development and education, and the increased recognition of the need to address the mental health consequences of conflict and natural disaster will be an ongoing challenge to professionals and those impacted by mental illness.

Conclusion

International child and adolescent mental health is no longer an exotic topic for theoretical discussion. With our global village, knowledge of child and adolescent mental health problems throughout the world is an important part of the education of all child and adolescent psychiatrists and allied professionals. The perspective gained from appreciating the stressors of children and adolescents in parts of the world embroiled in conflict and the nature of the responses offers the opportunity to learn more about the resilience of children and adolescents and about what we must do to develop more effective intervention programs.

The dearth of trained child and adolescent psychiatrists and allied professionals in developing countries challenges us to find the most effective means for inculcating knowledge and providing meaningful services. It is unrealistic to assume that any effort will meet the needs of child and adolescent psychiatry as determined by conventional planning assumptions. As services evolve in developed countries, there is probably much that can be learned from the way in which less developed countries have found the means to support families and individual persons to be relatively self-sufficient even when they are affected by mental disorders.

Given the enormity of the challenge to extend child mental health in a meaningful

manner globally, the establishment of regional centers of excellence should be considered. These centers would incorporate resource libraries, have access to consultants, support training, and in some instances provide clinical diagnostic functions. Ultimately, the goal is to establish a sufficient cadre of child mental health professionals trained to an acceptable standard, with the capacity to relate in a culturally appropriate manner to the mental disorders of children and adolescents, and to be able to support the healthy development of children and adolescents worldwide.

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