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Special Issue on Evidence-Based Mental Health Assessment and Care in Low- and Middle-Income Countries

Adam B. Lewin, PhD, ABPP, and Eric A. Storch, PhD, Guest Editors

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Evidence-Based Mental Health Assessment and Care in Low- and Middle-Income Countries: A Promising Campaign

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Dissemination of evidence-based mental health care is a significant problem in the United States and other developed countries. Despite costly endeavors to develop and empirically validate psychosocial interventions, access to quality, data-supported treatment remains limited. Many patients fail to access evidence-based psychological care because of barriers including distance, cost, and a limited number of trained providers. Notably, non–evidence-based care continues to dominate mental health arenas and many providers continue to rely on non–empirically based techniques. Unfortunately, the onus of obtaining evidence-based treatment often falls upon the consumer who must investigate and seek out the best course of care. Notably, the current limited state of access is in spite of hundreds of millions of dollars in government- and private foundation–funded efforts to close the gap between research and practice. A sizable literature documents challenges and efforts to overcome the research-practice gap—which remains a significant problem in countries with advanced infrastructure, such as the United States. This gap will not be the focus of the present issue. Rather, the present issue addresses the seemingly insurmountable challenge of characterizing mental health problems and introducing and testing evidence-based psychosocial treatments in low- and middle-income countries. Remarkably in regions around the globe, where civil unrest is rampant while clean water, roads, and health care are lacking, encouraging efforts directed at evidence-based evaluation and intervention are materializing. The present issue focuses on groundbreaking international endeavors in these emerging areas.

According to the World Health Organization (2008), mental illness contributes to at least 14% of the world’s global disease burden. Not surprisingly, both mental health research and evidence-based services are lacking in developing countries. Research emphasis is not commensurate with the staggering extent and impact of this pandemic. Patel and Sumathipala (2001) reported on international representation in psychiatric journals: Only 6% of mental health literature was
published on regions accounting for more than 90% of the world’s population (with less than 1% describing interventions in developing countries). Evidence-based services and practice guidelines are similarly lacking. The treatment gap in developing countries exceeds 75%, that is, the large majority of the population receives no care at all (Dua et al., 2011). Political and economic unsteadiness, limited human resources, and generally low fiscal investment contribute to disparaging availability of mental health services within low- and middle-income countries (Breuer et al., 2014; Kakuma et al., 2011; Lund, Petersen, Kleintjes, & Bhana, 2012; Saraceno et al., 2007). Furthermore, mental health services and research must compete with other public health priorities (e.g., HIV/AIDS, diabetes; Lund et al., 2012).

Although there are trends suggesting that the disparity in mental health services and research among low- and middle-income regions is gradually improving, only a small minority of individuals with mental illness receive services (Thorncroft, 2012). Unfortunately, even when treatment is available, interventions are often of substandard quality and without evidence basis (Dua et al., 2011). Notably, despite these considerable obstacles, prodigious efforts are emerging. For example, a strong line of research suggests the feasibility and efficacy of implementing mental health treatments in nontraditional settings/formats (e.g., primary care; Patel et al., 2003), training and supervising nonspecialized workers to maximize the scant availability of experts in mental health care (Kakuma et al., 2011; van Ginneken et al., 2013).

This special issue presents seven review and empirical articles addressing the aspirational goals of improving research and dissemination of evidence-based mental health care to low- and middle-income countries. We are pleased that 27 international experts in psychology, pediatrics, psychiatry, and public health heralding from 16 universities, hospitals, and civic and philanthropic institutions with research focused on regions such as Vietnam, Zambia, the Democratic Republic of Congo (DR-Congo), Brazil, Panama, El Salvador, or Nicaragua have contributed manuscripts detailing a range of topics including the nature and treatment of specific childhood anxiety disorders and directions for future investigation.

We kick off this special issue with the presentation of an extensive, multidisciplinary mental health dissemination effort in Southeast Asia. Dr. Ngo and her international team discuss the Vietnam Collaborative Care for Depression Program (CCDP), an evidence-based dissemination initiative providing care for depression among Vietnam’s lower income citizens. As is true for most low-or middle-income countries, Vietnam has a severe dearth of mental health resources. The CCDP was developed to address the treatment gap by task-shifting treatment for depression to community-based primary care providers (e.g., community health workers, nurses) with support from psychiatrists. The authors review the development and implementation of the program (which includes components such as screening, assessment, medication, and behavioral activation). This impressive program screened approximately 40,000 individuals for more than 2 years across 12 sites. Dr. Ngo discusses barriers to implementation and strategies for creating a sustainable model of care.

Our second contribution focuses on the immense challenges of implementing evidence-based practice within low- and middle-income countries. Specifically, Dr. Murray and her team from the Johns Hopkins University, University of Zambia, and Zambia Ministry of Health discuss barriers such as limited provider training, minimal resources, and lack of infrastructure in the context of high-impact problems: intimate partner violence, abuse, and suicide. For example, lack of key government resources for mental health and child protective services program make it difficult to establish evidence-based mental health programs in that managing “safety” challenges such as domestic violence and suicidal behavior exceeds available resources. The authors review key problem areas and present strategies for implementation/training on safety protocols at a local level. Case and research examples of operationalizing safety protocols are presented based on work in central and southern Africa (Zambia and DR-Congo).
Next, Dr. Zepeda-Burgos examined the status of pediatric mental illness and mental health services for the youth in El Salvador. The authors, who represent institutes of higher learning in Spain, El Salvador, and the United States, discuss the staggering rates of psychiatric illness among the youth in El Salvador, which is a region marked with poverty, violence, economic instability, and frequent natural disasters. Dr. Zepeda-Burgos discusses barriers to treatment—including that mental health care receives only 1% of healthcare funding. She emphasizes the critical need of improved dissemination of empirically supported treatments in countries such as El Salvador where child abuse ranks among the most common mental health referral. The article acknowledges that although the probability of receiving an evidence-based treatment for child mental health is extremely low, the importance of improving access to quality treatment is paramount. The feasibility of improving access to research-supported treatments is subsequently reviewed.

Extreme poverty and violence are not the only barriers to evidence-based mental health. In a thought-provoking review, Drs. Andrea Stachon and Isabela Machado da Silva discuss barriers to evidence-based treatment of pediatric obsessive-compulsive disorder (OCD) within Brazil’s multilayered health system. Despite robust responsiveness to evidence-based treatment such as selective serotonin reuptake inhibitors or exposure/response prevention therapy (Lewin & Piacentini, 2009), accessibility to specialized treatment is limited to the insured/private-pay-patients; most of the population (70%; receiving public-funded health care) cannot access evidence-based treatment for OCD. Lack of sufficient training of psychologists and psychiatrists (in evidence-based treatment) further impedes progress. If services are rendered, the treatment is often non-evidence-based (e.g., psychoanalysis for child OCD). The authors discuss innovative training initiatives to improve mental health services for child OCD within the public sector in context of the many barriers.

Dr. Paul O’Callaghan from Queen’s University, Belfast, provides a compelling account of the impact of conflict and war on mental health—including the inadequacies of assessment, intervention, and research within war-torn regions such as DR-Congo. Drawing from his extensive program of research within DR-Congo, Dr. O’Callaghan discusses the prolific extent of trauma, sexual assault, child abductions, and other atrocities of countries in the midst of violent turmoil. Next, the article discusses the mental health needs of DR-Congo as well as the challenges of coordinating implementation of relief effort among numerous agencies. The article concludes with a review of research, a discussion of barriers to service delivery, and suggestions for future directions.

Dr. Salinas-Miranda and his team from the University of South Florida and the American University, Nicaragua, review the challenges of assessing and treating children with developmental delays in Nicaragua. Despite frequent exposure to violence and other marked risk factors, Nicaragua lacks programmatic training in evidence-based mental health. Access to trauma-focused cognitive behavioral therapy and other data-driven interventions is nonexistent for the vast majority of those in need. The authors discuss strategies for maximizing developmental outcomes including screening and early identification and perinatal care/maternal health care. Dr. Salinas-Miranda and colleagues provide several recommendations for future policy, study, and education to optimally maximize early child development within extremely poor countries such as Nicaragua.

Finally, we conclude this special issue with a contribution between the United States and Panama. Specifically, Dr. Arlene Calvo and her multidisciplinary international team provide an overview of health disparities and barriers contributing to poor outcomes among the largest underserved indigenous population in Panama. The researchers introduce an exciting community-based intervention focused on education and training of local health promoters with an emphasis on reducing domestic violence. The program trained approximately 80 health promoters to provide outreach to almost 7,000 community members—exceeding prior efforts
by nearly eightfold. A 45% increase in knowledge regarding domestic violence was among the impressive outcomes.

It is our hope that these impressive contributions fuel ongoing efforts in establishing sustainable models of evidence-based assessment and treatment in low- and middle-income countries as well as parallel programatic research efforts. Perhaps the innovative, groundbreaking initiatives will spark the passion within junior researchers who are not yet so fully entrenched within their own careers that they will reach out to international experts and initiate collaborations. In your examination of these studies and programs, be certain that each author—at least at some point—was told that his or her plan was “too ambitious” or “not feasible” or “is grains of sand on the beach.” These initiatives are paving the way to make the differences for individuals, families, and (with hope and continued effort) . . . eventually systems; our applause and appreciation to these contributors for standing in the face of considerable challenge. It is our hope that these articles not only inform the reader about international research pursuits but also plant the seed to cultivate collaborations that can span the globe.

REFERENCES


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The Vietnam Multicomponent Collaborative Care for Depression Program: Development of Depression Care for Low- and Middle-Income Nations

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In this article, we discuss the Vietnam Multicomponent Collaborative Care for Depression Program, which was designed to provide evidence-based depression care services in low-resource, non-Western settings such as Vietnam. The article provides the program development background; the social, economic, and political context in which the program was developed; and the structure and content of the program and their underlying rationale in the context of rural Vietnam. Although the program was found to be acceptable, feasible, and effective in reducing depression outcomes, we did face challenges in implementation, which are outlined in this article. Key challenges included cultural factors (e.g., a lack of recognition of depression as a health-related entity amenable to professional treatment, relatively low levels of psychological mindedness useful for understanding of psychological interventions) and health system (e.g., lack of mental health specialists, overburdened health providers unfamiliar with behavioral interventions) factors. We discuss the strategies we employed to resolve these challenges and our successes and failures therein. We conclude with recommendations for others interested in implementing similar programs in low- and middle-income countries settings.

Keywords: depression care; low- and middle-income countries (LMIC); collaborative care; task shifting; primary care integration
By 2030, unipolar depression is projected to be among the largest contributor to the world’s healthcare burden in both high-income countries (HIC) as well as low- and middle-income countries (LMIC; Mathers & Loncar, 2006). It has been estimated that at any point in time, about 99 million people around the world would be suffering from depression (World Health Organization [WHO], 2008). Although effective mental health treatments exist for depression, most individuals experiencing depression fail to receive appropriate treatment. According to the WHO Mental Health Atlas (2011), this mental health resources and treatment gap is particularly large in Asia, the world’s most populous continent. Several factors underlie this treatment gap, including individuals’ lack of awareness of or access to resources, poor quality of care, stigma regarding mental health treatments, and cost of services (WHO, 2011); foremost among these factors, however, is a severe shortage of mental health professionals globally (WHO, 2006).

**VIETNAM**

This article focuses on the Southeast Asian nation of Vietnam. With a population of more than 92 million, it is the 14th most populous country in the world (Central Intelligence Agency, 2013). The per capita annual gross domestic product (GDP) is $1,596, placing it in low- to middle-income national status (World Bank, 2012). As with many LMIC, because Vietnam began to transition from a primarily rural, agricultural economy to a more mixed industrial economy, its government made an explicit decision to focus the nation’s limited resources on expanding infrastructure most directly connected to economic development (e.g., roads, seaports) with health—in particular mental health—and other social services receiving relatively little investment (Stern, 1998). The focus on economic development was successful at the national level: Vietnam is considered “a development success story” by the World Bank, with current GDP growth of about 5% per annum, having dropped from about 7.5% per annum subsequent to the 2007 world recession (World Bank, 2012). However, health and related services’ infrastructure has not developed comparably. Despite the general economic development, access to health care has actually become more difficult for some segments of the population as demand has expanded, and certain aspects of the system have become privatized and less supported by government subsidies (Vuong, Van Ginneken, Morris, Ha, & Busse, 2011).

Comparable to its Southeast Asian neighbors, Vietnam spends about 6.8% of its GDP on health care (WHO, 2013). Health care is provided in a four-tier system, at the (a) central (national hospitals), (b) provincial, (c) district, and (d) commune (which represents approximately 10,000 persons) levels, with the primary care point of entry into the system the commune health station (CHS). In the 5-year health development plan from the Vietnamese Ministry of Health (MOH; 2010), the availability of more advanced medical procedures such as organ transplant and endoscopic surgery in at least some areas of the country is noted. However, although “community mental health” is mentioned as a national health target, the discussion of mental health consists of three sentences in the 51-page report, reflecting overall MOH priorities. Schizophrenia and epilepsy are mentioned but not depression. With the exception of upper- and upper middle-class individuals in the two major cities (Ho Chi Minh City and Hanoi), access to mental health services is provided through a network of 27 provincial psychiatric hospitals distributed across the 64 provinces or through mental health departments in district-level general hospitals (Niemi, Malqvist, Giang, Allebeck, & Falkenberg, 2013). These facilities focus mainly on schizophrenia, bipolar disorder, and epilepsy but not depression.

The Vietnam MOH has recognized some need for treatment resources for common mental health problems such as depression and anxiety and has formulated a 5-year mental health plan that extends services to CHS (MOH, 2010). Because of budget restrictions, however, implementation has been limited. At the time of our project initiation, depression care in primary care was
essentially nonexistent and available older generation medications (e.g., tricyclics) were the primary treatment option for depression.

Social factors play a key role in limiting access to mental health care. As in most countries—HIC as well as LMIC—stigma can have a significant impact on help seeking in Vietnam, underlying lack of access because individuals with mental illness avoid seeking help because of shame or fear of discrimination (Vuong et al., 2011). Mental health treatment in Vietnam also faces additional specific challenges, particularly for common mental health conditions such as depression (as opposed to treatment of schizophrenia and seizure disorders). These include (a) a cultural lack of recognition of depression as a disease entity that can be ameliorated through the medical system, in particular through psychiatry; (b) a lack of psychological-mindedness, which can make implementation of psychotherapies involving cognitive components especially challenging; (c) a lack of mental health personnel at all levels; and (d) even within the current mental health personnel, almost no training regarding evidence-based screening and behavioral treatment options for depression (Niemi et al., 2013).

In Vietnam as in many other LMIC, what is called “depression” based on Western conceptualizations may be unrecognized as a discrete pathological entity by many within the population. In Asia, depression typically presents with a mixture of negative affect and somatic complaints, emphasizing the latter (Phan, Steel, & Silove, 2004). When they do seek help, Vietnamese often use traditional approaches (e.g., herbal medicines, native healers), compounding challenges for health personnel’s attempts to provide treatment.

Vietnam faces a severe shortage of mental health specialists, as is true for most LMIC. This has been exacerbated by unintended consequences of increased freedom within Vietnam. Previously, graduating medical students were assigned specialties by the government based on the country’s needs as perceived by the government. With freedom to choose ones’ specialty now instituted, few medical students choose psychiatry (Vuong et al., 2011). This lack of new psychiatrists entering the system exacerbates the existing shortage of mental health professionals, although a recently opened graduate program in clinical psychology is producing a small number of evidence-based-trained clinical psychologists (Weiss et al., 2011) who may begin to address this shortage.

**Task Shifting in Primary Care**

Task shifting or task sharing of mental health care is one approach used to address shortages of mental health resources in LMIC. They involve focused and relatively brief training of non–mental health workers (e.g., general practitioners [GPs], nonmedical personnel) with a circumscribed and highly structured role (Fulton et al., 2011; Patel, Simon, Chowdhary, Kaaya, & Araya, 2009). For instance, physician’s assistants might be trained to conduct depression screenings using a depression interview but would have no training or competency in other aspects of mental health care. Such a strategy is not new and has been used for decades within other areas of medicine (e.g., HIV care; Lewin et al., 2005). Regarding mental health, relatively simple treatments for depression such as behavior activation and problem-solving therapy have been shown to be effectively managed by non–mental health specialist health workers, such as nurse care managers, who coordinate care and deliver behavior activation, problem-solving therapy, and manage medications, with support from mental health specialists (e.g., Mutamba, van Ginneken, Paintrain, Wandiembe, & Schellenberg, 2013; Unutzer et al., 2002; Wells et al., 2000).

Collaborative care models are a well-established evidence-based approach for task shifting depression care to primary care. Although much of this work was developed and tested in HIC, there is increasing evidence that such programs can produce positive effects when implemented in LMIC, particularly regarding medication-based treatments for depression (Patel et al., 2009). Developed originally as an approach to manage chronic illnesses (e.g., diabetes), collaborative care is now a quality improvement model for integration of depression care into primary care.
settings, where mental health services can be more accessible and less stigmatized. Given that the burden of depression is high but often unrecognized, and that patients in East Asia often report greater somatic complaints (e.g., sleep problems, fatigue) rather than depressed affect, primary care settings are an ideal setting for provision of depression care.

**Development of the Vietnam Multicomponent Collaborative Care for Depression Program**

To help address this treatment gap, our research collaborative developed, implemented, and evaluated the Vietnam Multicomponent Collaborative Care for Depression Program (MCCD). The program was designed specifically for Vietnam but also structured so that it would be more broadly applicable for other LMIC. The program is based on a collaborative care, task-shifting approach to the treatment of depression, with mental health care for depression managed in community-based primary care settings by primary care providers (e.g., nurses, community health workers), with support from psychiatrists. The MCCD combines collaborative care models for the treatment of depression developed for low-resource communities in the United States (e.g., Partners in Care [PIC]; Wells et al., 2004) and in India (MANAS; Chatterjee et al., 2008). These programs were adapted for Vietnam by a team of mental health professionals in Vietnam and the United States who specialize in collaborative care for depression care. The Vietnam MCCD demonstration project was conducted from 2009 to 2012 in 12 sites in Danang and Khanh Hoa provinces, and 8 of these sites participated in the outcome trial.

**Intervention Overview.** The MCCD consists of eight components: routine screening, diagnostic assessment, psychoeducation, antidepressant medication, adherence management, behavior activation therapy (Ngo, Lam, Dang, & Weiss, 2010), follow-up, and family support. CHS nurses function as care managers overseeing treatment, providing routine screening, psychoeducation, BA, and care coordination; GPs are responsible for diagnosis and medication assessment and treatment. Community health workers provide the community education and follow-up. All interventions are conducted in individual (as opposed to group) sessions. CHS providers are supervised weekly by a visiting psychiatrist.

The MCCD involves a stepped-care model for management of mild to moderate depression at the CHS with more severe depression or individuals with risk indicators (e.g., suicidal ideation, substance abuse) seen by psychiatrist at CHS or referred to the psychiatric hospital. Patients considered to have mild depression (Patient Health Questionnaire [PHQ] = 10–15, no risk indicators) are offered the first-level intervention, which includes psychoeducation and BA at the CHS. Patients with moderate and severe depression (PHQ > 15, no risk indicators) in addition are offered the choice of antidepressant medication at the CHS. Patients with risk indicators or those not responding to medication after 4 weeks are treated by psychiatrist at the CHS or referred to the psychiatric hospital.

**Identification of Depression.** Community screening using PHQ-2 identified high-risk individuals and referred them for assessment at the CHS, which implemented routine screening for depression using the PHQ-9 (PHQ-9 score ≥ 10) and follow-up evaluation by a CHS GP using a Vietnamese version of the depression module of the MINI International Neuropsychiatric Diagnostic Interview (Lecrubier et al., 1997), also assessing for psychosocial stressors.

**Psychoeducation.** A motivational interviewing–informed 45-min psychoeducation session assesses patients’ perspectives about their problems and their readiness for change and provides information about depression (e.g., its relatively high prevalence) to decrease stigma and educate patients about benefits and availability of depression treatment. During this session, patients complete a checklist regarding common barriers to care (e.g., transportation, work issues), and barriers are discussed and problem-solved.

**Medication Management.** Because of their limited formal psychotropic medication training, CHS GPs and nurses use a simplified algorithm for depression medication prescription. The
algorithm involves two serotonin reuptake inhibitors (fluoxetine and amitriptyline) selected because of their low cost in LMIC and their differing effects on anxiety and sleep.

**Behavior Activation.** The Vietnam MCCD five-session behavior activation (BA) therapy module (Ngo et al., 2011) was adapted by the first and second author from the BA module of the 12-session cognitive behavioral therapy (CBT) program used in the We Care, Community Partners in Care (CPIC), and REACH NOLA projects (Miranda et al., 2003; Ngo, Centanni, Wong, Wennerstrom, & Miranda, 2011). The MCCD BA program includes BA combined with problem-solving skills training, which was judged by the Vietnamese members of the team to be the most culturally appropriate, feasible, and potentially efficacious psychological/behavioral intervention for rural Vietnam. Sessions focus on (a) the relation between activities, mood, and functioning; (b) increasing pleasurable activities; (c) overcoming obstacles to healthy activities (i.e., problem solving); (d) maintaining healthy activities; and (e) setting goals. The primary cultural adaptation made for Vietnamese society was modifying the stated purpose for increasing pleasurable activities, which typically is given as to reduce depression. This was, however, seen as self-centered in Vietnam, so the purpose of increasing pleasurable activities was given as to improve family and work functioning, which was more acceptable within collectivistic, functionally oriented societies such as Vietnam and likely many other LMIC.

**Feasibility, Acceptability, and Effectiveness of the MCCD in Vietnam**

Feasibility and acceptability are critical components of all health-related programs. To understand the feasibility and acceptability of the MCCD program in Vietnam, as part of our demonstration project (of which the outcome trial was a subcomponent), we tracked percentages of patients who accepted treatment and who completed treatment. The demonstration project was conducted for 2 years across 12 sites, which included four research (MCCD) and four comparison sites (guideline medication only) in the outcome trial, as well as four nonresearch implementation sites that also implemented the MCCD program but did not participate in the outcome study. Across these sites, nearly 40,000 people were screened for depression in the community using the PHQ-2, with 4,380 screening positive (PHQ ≥ 3) and referred to the CHS for further evaluation. Further evaluation included the routine screening with PHQ-9 and diagnostic evaluation using a structured diagnostic tool adapted from the MINI Depression module for positive PHQ-9 screens by primary care providers. Diagnoses were checked by supervising psychiatrists. More than half (2,541) of those who screened positive on the PHQ-2 followed up on the referral for assessment at the CHS, and 914 were formally diagnosed with a depressive disorder. Based on the PHQ-9, 50% had mild depression, 35% had moderate depression, and 14% had severe depression. Treatment acceptability was high, with 92% of patients recommended for treatment accepting, as were treatment completion rates, with 73% of patients completing treatment (Chatterjee & Nguyen, 2012). This treatment completion rate is higher than that of most other collaborative care depression programs around the world. In the MANAS program in India, for instance, 61% of patients completed treatment (Patel et al., 2003). Overall, these statistics suggest that the program was feasible, in that a substantial volume of individuals were screened, assessed, treated, and completed treatment. They also suggest that the program is acceptable in this context with this population, with more than 90% of patients offered treatment accepting.

As a component of the demonstration project, we conducted an outcome evaluation of the Vietnam MCCD program. The four research CHS sites (which received the full MCCD program including BA as well as guideline medication) were compared to the four comparison CHS (which received guideline medication only). This comparison allowed for assessment of the incremental effects of a complex, multifaceted, behavioral intervention—BA—delivered by non-specialists. Analyses indicated that at 3- and 6-month post baseline, both groups had significantly decreased in depression and anxiety and significantly increased adaptive functioning, with the MCCD group showing significantly greater improvement.
Implementation Challenges

Based on these experiences and data, the MCCD program appears acceptable, feasible, and effective with our population of rural Vietnamese. Nonetheless, we faced a number of challenges in the project, particularly in the early phases.

**Engagement/Retention.** In the initial project development phase, prior to initiating the research outcome evaluation, we faced significant challenges in identifying and engaging patients. Initially, all patients coming to participating CHS were screened for depression as part of the CHS’ routine admissions evaluation. However, this approach underdetected depression, identifying only about 2% of patients as having possible depression, which is quite low for a primary care clinic, which has been estimated to be between 5%–9% (O’Connor et al., 2009). Also during this initial phase, treatment acceptance rates were low and dropout high. As in most LMIC, patients entering into primary care were neither seeking mental health care nor were they even experienced with the concept of depression. They thus found it odd to be asked questions about their emotions and other cognitive/affective symptoms of depression such as hopelessness, did not understand the relevance of these questions, and consequently often appeared disinclined to report depression symptoms regardless of whether they were experiencing them. Qualitative interviews with providers and patients after the first 6 months of the project indicated that low awareness and understanding of depression, lack of knowledge about the availability and efficacy of services, stigma about depression, and financial barriers were common reasons for poor patient engagement. Because the CHS was a new location for mental health services, even when patients were interested in depression treatment, there was little trust in the CHS. In fact, several patients in the initial project phase refused treatment at the CHS but followed-up with referrals to the provincial psychiatric hospital (Ngo et al., 2011).

To address this barrier, we engaged in a community-wide mental health information, education, and communication campaign. Partnerships were developed with community organizations, such as the Women’s Union and Farmers Union, to strategize and develop the most effective mediums for dissemination of depression information. Education packages, including leaflets, posters, education brochures, and others, with information about depression prevalence, depression as a treatable illness, and the availability of services in the CHS were distributed throughout the community via door-to-door visits and community meetings held by our partnering community organizations. Posters explaining depression and its treatment as well as flipcharts about depression and stress management were distributed to health service settings for use with patients. Interviews with former patients regarding their perspectives and experiences with depression and its treatment were aired on local television. Public announcements through loud speakers, a common method for health campaigns in Vietnam, were also made to raise awareness and destigmatize depression care in communes where services were being offered. These efforts culminated in a highly publicized parade on Mental Health Day 2011, which was followed by televised coverage, newspaper articles, and radio interviews about depression and available services. These education and engagement efforts not only raised awareness about depression and availability treatment but also generated significant local community “buy in” and political support for the program as well as national media attention. By the end of Year 2, positive screening and treatment acceptance had increased and treatment dropouts decreased significantly, and word-of-mouth referrals to the CHS for depression care had started creating patient-initiated demand for depression care services.

**Limited Healthcare Human Resources.** As with most LMIC, Vietnam faces significant shortages in healthcare human resources, in particular regarding mental health but also across all health domains. As a consequence, providers including those at CHS frequently are overburdened because the system is understaffed. Health system budgets and funding are centralized at the provincial and national levels, and CHS have fixed staffing so even if a project can fund additional staff, they...
cannot be hired. Not surprisingly then, initial implementation of the MCCD was met with some resistance by CHS providers who already felt overwhelmed and are not enthusiastic about one more program being placed on their shoulders. This was compounded by the fact that depression care requires longer sessions (45 min vs. 15 min for usual health visits), greater coordination, more frequent patient contact, and the like than typical healthcare visits. The provincial psychiatric hospitals providing supervision and project management also were overburdened and face chronic staffing shortages. Even if the hospitals had permission from the government for new positions, all psychiatrists in the hospital district already were working at the hospital, as mandated by the government. Psychologists and social workers are even in shorter supply in Vietnam. This lack of potential to increase staff at the hospital meant that the taking on of additional responsibilities for the project could not be compensated by reduction of other responsibilities at the psychiatric hospital. Finally, positions in the government health system are low-pay, so most specialists and doctors have after-hours private practices, which limit their ability to participate in projects after work hours.

Thus, provider resistance to the program initially was abundant. In response, our program emphasized the importance of this initiative (developing collaborative care for depression in rural Vietnam) and helped the providers develop a sense of pride in being “agents of change” for the system, their patients, and their country. We appealed to their social and personal values, such as helping the community, having meaningful work, and others, providing opportunities for growth and leadership. We frequently solicited input from the providers, showing respect for their expertise, and most importantly used their feedback in real and visible ways to improve the system. Following the suggestion of community health workers, for example, we disseminated depression education materials door-to-door to raise awareness about depression care. The community health workers also suggested that the program be promoted through community meetings with local organizations and took the lead on these efforts. During the midterm and final program evaluations, providers stated how they participated because they felt inspired by the project, saw the positive impact on their patients, and appreciated what they learned in the program (Chatterjee & Nguyen, 2012; Ngo et al., 2011).

**Limited Supervision Infrastructure.** The supportive, collaborative, clinical improvement–focused supervision model, which is a key element of the Vietnam MCCD, was unfamiliar to our Vietnamese psychiatrist supervisors. It was, in fact, generally contrary to standard supervision in the Vietnamese health system, which tends to be hierarchical and punitive, focused on ensuring that subordinates do the tasks to which they have been assigned, monitoring of patient contacts, and others. As with most if not all manualized cognitive-behavioral interventions, MCCD supervision focuses on open discussion about mistakes and uncertainties and requires an open, trusting professional relationship. To resolve these conflicting perspectives, in addition to training supervisors in the technical aspects of the MCCD supervision process, we focused on the goals of collaborative supervision (i.e., to improve patient care) as well as on helping supervisors understand that collaborating with organizational subordinates did not undermine their authority within the institution and actually enhanced their efficacy when working with subordinates. In addition, to guide the implementation and support the supervision process, we developed implementation adherence tools and supervision support procedures. These included review of one audio-recorded BA session per provider per week for the first two cases or until competency and fidelity were demonstrated. Ongoing client progress was monitored with the PHQ-9 every 2 weeks and used in supervision, and the psychiatrist supervisors were themselves supervised by directors of the psychiatric hospital on a weekly basis, who were in turn supervised by the international clinical psychologist members of the team.

As a consequence, psychiatrists ultimately developed solid competency in the supervision model, became more knowledgeable in the use of fidelity and patient data to guide practice through supervision, and are now providing trainings and dissemination of the program to other
groups, including the National Psychiatric Hospital and Hue Psychiatric Hospital. As their competence increased, reliance on international experts decreased and by the end of Year 2 was no longer needed.

**Limited Mental Health Expertise and Experience.** Depression care is relatively new for Vietnam because historically, most psychiatric services have been focused on schizophrenia, bipolar disorder, mental retardation, and epilepsy. And using evidence-based psychological treatments was essentially unheard of in Vietnam at the beginning of the project, so even the Vietnamese MCCD specialists needed extensive training. In addition, the MCCD required providers to assume professional roles counter to their traditional roles within society and the healthcare system. In Vietnam, relations between patients and medical personnel are hierarchical and directive, which runs counter to the more collaborative nature of most behavioral and psychological interventions. Correspondingly, Vietnamese patients expect health providers to be directive and even authoritarian. In fact, patients initially expressed discomfort with providers interacting in a collaborative style because they felt this indicated that the providers were lacking self-confidence and competence in what they were doing, because the providers were asking for and discussing the patient’s thoughts about health issues.

To address providers’ limited mental health expertise, workshops on collaborative care for depression, focusing on the Vietnam MCCD (screening, assessment, psychoeducation, BA, guideline in antidepressant care), were conducted. Training was explicitly designed to be intensive to systematically build capacity across all levels of the system from specialists at the provincial psychiatric hospitals, to physicians and nurses at the CHS, to the village health collaborators. Under the guidance of the international experts on the team, the Vietnamese psychiatrists themselves first implemented BA at their hospitals to gain experience before becoming BA supervisors and ultimately trainers themselves. Trainings were provided on-site, with intensive (1–2 hours) weekly supervision, including the hospital directors, provided over the internet by the international clinical experts. To solidify the BA model, supervision included reviews of case conceptualization, feedback on adherence to the model, as well as support for clinical implementation.

In addition, to increase the likelihood that both the patient and provider would feel comfortable in a more collaborative relationship, training and supervision were provided to the providers in general counseling skills and engagement techniques (e.g., motivational interviewing approaches). These included discussion of the rationale for provider–patient collaboration—for example, regarding emotional functioning, patients have more understanding of their situation than a provider has. Providers were taught to focus on enhancing patient’s own motivation for change rather than imposing the provider’s own reasons for change.

These strategies resulted in greater treatment engagement and lower dropout rates than typical mental health treatment in Vietnam. Yet they also dramatically altered the dynamics and relations between higher level specialists (psychiatrists), GPs, nurses, and community health workers. Across the levels of the system, the providers saw themselves as members of a team united by the common goal of helping their patient rather than as superior or subordinate members of a medical hierarchy.

**Sustainability.** As with other LMIC as well as HIC, mental health remains one of the lowest priorities in terms of government spending in health (WHO, 2011). This poses numerous challenges for initial development and implementation of mental health programs but in particular for sustaining programs. This is true even for mental health interventions demonstrated to be feasible, clinically efficacious, and cost-effective for the health system and society. In Vietnam and other developing countries, most new social and mental health programs developed and piloted are funded by foreign donors, including international philanthropic organizations such as Atlantic Philanthropies or United Nations Children’s Fund, or by research funding agencies.
in the United States, and so forth. This support is intended to be short-term, designed to lay the 
foundation for the program but not provide ongoing funding, with the expectation that the local 
government will take ownership and provide long-term financial support. Without local gov-
ernmental support in funding as well as policy (to support nationalization of the program, etc.), 
these efforts cannot be sustained. Leadership from politicians, administrators, and health and 
mental health professionals is crucial.

Because of our long experience in the country, we were aware of this issue from the be-
inning of the project and consequently focused on engaging leadership across health, mental 
health, and social service sectors as well as funding agencies and policy makers. Workshops and 
meetings with leadership focused on educating leaders about the need for depression care, the ef-
ficacy of programs such as the Vietnam MCCD, their social impact, and helping to develop a plan 
for the long-term support of the program. As a function of these efforts, several other projects 
grew from this work. For example, the WHO Vietnam office adopted the MCCD depression care 
guidelines developed by our collaborator, the director of the Danang Psychiatric Hospital, and 
these are being implemented in Danang province; limited funding has so far precluded dissemi-
nation to other provinces. Our Vietnamese psychiatrist partners (Trung Lam and Thanh Dang) 
have become national leaders in mental health in Vietnam, including membership in the National 
Mental Health Planning Committee, and they are leading other mental health efforts that have 
grown out of this project. The original project manager and program initiator (Tam Nguyen) has 
established a Vietnam office for Basic Needs, an international community-based organization 
focused on community-based mental health support, and now serves on mental health advisory 
boards for the MOH and Ministry of Labor, Invalids, and Social Affairs (MOLISA), which are the 
two ministries that address mental health issues. The Vietnam Veterans of America foundation 
project manager (Mai Hien Nguyen) is now a member of the Consortium Mental Health Project, 
which supports key Vietnamese ministries (MOH and MOLISA) in development of a national 
community-based mental health framework.

Most centrally, the MCCD continues to be implemented in the settings in which it was estab-
lished. The four-treatment CHS continue to implement the MCCD, although with a simplified, 
what is seen as more realistic, one- to two-session BA program as well as the psychoeducation, 
guideline medication, and so forth. The two psychiatric hospitals that provided supervision are 
implementing the full MCCD. The program has not yet expanded, however, beyond its initial 
base primarily because of a lack of funding from the government.

**Conclusions and Recommendations**

Developing evidence for community partners strengthens the mental health initiative. At the 
beginning of the project, we encountered a great deal of resistance to task-shifting depression 
care. Mental health policy leaders did not believe that nonspecialists could safely and effectively 
work outside the scope of their formal training to provide health treatments normally provided 
only by specialists. But the success stories from the patients and both specialist and nonspecialist 
providers and strong research evidence convinced even the strongest critics that the task-shifting 
component of our program was not only feasible/acceptable but also effective. In order for local 
and national stakeholders outside direct project implementation to be aware of this information, 
workshops, conferences, and site visits were frequently held to provide opportunities for exchange 
and firsthand experience with the project successes. By the end of the project, this resulted in in-
creased commitment at all levels, including national-level support, and an expansion of mental 
health efforts from direct services to policy changes.

Relationships are key to success. As we have hopefully articulated, the importance of establish-
ing sustainable relationships is critical to achieve successful mental health program development
and implementation in LMIC such as Vietnam. Strong relationships provide the foundation for the development of trust, openness, and commitment without which a project cannot move forward successfully. Although intellectual understanding of a program and project is essential, often much must be taken on faith by both sides at least initially when working within a foreign country (Vietnam) or when working within a foreign professional perspective (Euro-American psychology). It is the quality and depth of the relationship that provides the trust for such faith. When we began working in Vietnam in 2001, at a meeting to discuss national mental health needs in Vietnam at the Central Psychiatric Hospital No. 1 near Hanoi, a staff member stated, “Foreign projects come, and foreign projects go. Nothing changes” (Dang & Weiss, 2007). Part of our ability to develop strong relationships with our Vietnamese colleagues comes from their awareness of our long-term commitment to Vietnam and mental health in Vietnam. There are times in most projects when one perspective must push and ask for things in an urgent manner for the sake of the project, and this becomes more feasible in the context of a good relationship. And ultimately, the extent to which professional relationships can extend into genuine personal relationships, the stronger these effects become.

Leadership also is key. It also is worth emphasizing that success achieved by projects such as the MCCD is highly dependent on dedicated leadership like that of our Vietnamese partners. Only local mental health leaders who are willing to make personal and professional sacrifices to champion such endeavors can provide the tireless leadership needed to shift the system and motivate providers, administrators, and policy makers to take action. True leadership involves having a vision of what the future can be, understanding the path necessary to arrive there, and the selfless commitment to sustain effort. Although leadership can be fostered, in projects such as the MCCD, it also is a matter of selection of partners through an evolutionary process of trial and error and learning and success.

It is necessary to obtain engagement of all levels of the healthcare system in advance to implement a multilevel healthcare program. The MCCD is a trans-system program that spans from the lowest level of the healthcare system in Vietnam (the CHS) to the highest care level (provincial hospitals). Our experience was that in order for the program to be appropriately and successfully implemented, all levels of the system needed to be strongly committed to the project—that success was dependent on the weakest link. Throughout the duration of the project, we employed a wide range of activities for strategic engagement, focused on ensuring that needs and concerns of the various levels were at least somewhat addressed to support engagement. Linkages with leading community organizations such as the Women’s Union, the Farmers Union, and the People’s Committee were developed early. These linkages were essential not only for direct program support (e.g., receiving permission to implement the program) but also for indirect yet essential support of the program (e.g., increasing community awareness and education about depression).

Linkages across service sectors are needed for sustainable health system integration. Given the fragmentation of the health and mental health services and the low levels of human resources, it was necessary that all services be willing and ready to fill gaps for one another. For instance, CHS medical staff were unable to make home visits because of their overburdened schedules, so community health workers from social organizations such as Women’s Union and Farmer’s Union played a key role in conducting home visits for follow-up care. These community providers extended the care from the primary providers to reach patients where they were most comfortable, often in their homes. The flexibility of the mobile team of psychiatrists from the provincial psychiatric hospitals was critical, providing emergency clinical backup to fill in for the CHS GPs’ lack of expertise, ameliorating the primary care providers’ initial concerns about practicing outside their usual scope of practice.

Although mental health services in LMIC countries such as Vietnam are often heavily influenced by national economic functioning, ultimately the biggest challenges we faced were not directly economic in nature but rather social, cultural, and political. It was through the strength of
the relationships among the team members and the commitment and dedication of all partners that these challenges were overcome and project success ultimately was achieved.

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Implementing Evidence-Based Mental Health Care in Low-Resource Settings: A Focus on Safety Planning Procedures

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Despite advances in global mental health evidence and policy recommendations, the uptake of evidence-based practices (EBP) in low- and middle-income countries has been slow. Lower resource settings have several challenges, such as limited trained personnel, lack of government resources set aside for mental health, poorly developed mental health systems, and inadequate child protection services. Given these inherent challenges, a possible barrier to implementation of EBP is how to handle safety risks such as suicide, intimate partner violence (IPV), and/or abuse. Safety issues are prevalent in populations with mental health problems and often overlooked and/or underreported. This article briefly reviews common safety issues such as suicide, IPV, and child abuse and proposes the use of certain implementation strategies which could be helpful in creating locally appropriate safety protocols. This article lays out steps and examples of how to create a safety protocol and describes and presents data on safety cases from three different studies. Discussion includes specific challenges and future directions, focusing on implementation.

Keywords: global mental health; suicide; abuse; implementation; low-resource settings

Global mental health has seen significant advances over the past decade. Researchers have validated assessment tools creating evidence-based measures for use in several low- and middle-income countries (LMIC; e.g., Bass, Ryder, Lammers, Mukaba, & Bolton, 2008;
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Jordans, Komproe, Tol, & De Jong, 2009; Kohrt et al., 2011; Murray et al., 2011a). The effectiveness and feasibility of implementing evidence-based treatments (EBT) for mental health problems in LMIC have been shown through multiple randomized controlled trials (RCTs), including cognitive-behavioral interventions for depression in primary health care (Rahman, Malik, Sikander, Roberts, & Creed, 2008), Interpersonal psychotherapy for depression for adults and adolescents (IPT & IPT-A; Bolton et al., 2003; Patel et al., 2010; Bolton et al., 2007), Cognitive Processing Therapy (CPT) for posttraumatic stress disorder (PTSD; Bass et al., 2013), and a common elements treatment approach for multiple common mental health problems (Bolton et al., 2014; Murray et al., 2013). The research evidence has resulted in the World Health Organization (WHO) recommending EBT in their Mental Health Gap Action Programme (mhGAP; WHO, 2010). However, despite research evidence and policy recommendations, the uptake of EBT in LMIC is low. Although the sluggish uptake of EBT is not unique to LMIC or mental health (e.g., Proctor et al., 2009; Rudan, El Arifeen, Black, & Campbell, 2007), it is important to identify barriers and possible ways to facilitate their implementation.

The implementation of mental health interventions in LMIC is fraught with challenges, such as limited trained personnel and turnover, lack of government resources set aside for mental health, poorly developed mental health systems, and inadequate child protection services (Patel, 2009; Saxena, Thornicroft, Knapp, & Whiteford, 2007). One result of these challenges is that service providers may not be equipped to adequately respond to suicidal ideation or behaviors, domestic or intimate partner violence, and/or child abuse. Few clinical domains are as programmatically, clinically, and emotionally challenging as managing suicide, intimate partner violence, and child abuse. These “safety” challenges may deter organizations from including mental health services in their packages of care, thus serving as a significant barrier to uptake of evidence-based mental health assessments and treatments. Practical strategies to address serious safety issues in LMIC are a current gap in the literature as well as a barrier to implementation. This article will provide example strategies for developing local safety protocols in LMIC which could assist with the management, and hopefully prevention, of suicide, intimate partner violence, and abuse/neglect.

**Overview of Safety Issues: Suicide, Intimate Partner Violence, and Child Abuse**

**Suicidal Thoughts and Behaviors**

The WHO (2014) estimates that more than 1 million people die by suicide annually worldwide. However, this may be an underestimate because recent national estimates of the prevalence and risk factors for suicide are unavailable in many countries, particularly LMIC. In the chain of events leading to suicidal behaviors, the most common is mental health problems. Most suicide research has been conducted in developed countries, where studies have consistently shown that mental illness is present in 90% of suicides and serious suicide attempters (Beautrais et al., 1996; Cavanagh, Carson, Sharpe, & Lawrie, 2003). Nock et al. (2008), from the WHO World Mental Health Survey Initiative, reported that in high-income countries (HIC), the strongest diagnostic risk factors for suicide attempt were mood disorders, but impulse control disorders (intermittent explosive, attention-deficit/hyperactivity, conduct, and oppositional defiant disorders) were more predictive in LMIC. Also, often in this chain of events are facilitating factors such as the tendency to be impulsive or a state of intoxication, stressful life events, living in a culture in which social taboo regarding suicide is weak, the absence of others around to stop the suicide attempt, and finally, the ready availability of lethal means. Evidence-based effective suicide prevention efforts suggested within HIC include physician education in depression recognition and treatment and
restricting access to lethal methods (Mann et al., 2005; Shaffer & Craft, 1999). Many suicide prevention approaches commonly used in HIC are not feasible in LMIC, which lack resources, have poorly established primary and mental health service systems, and have weak political processes (Khan, 2005). An important early step in managing suicidal ideation is to ask patients directly whether they are suicidal. Other practical, feasible, and engaging clinical management strategies, which could be used in LMIC, include the creation of safety plans and hope boxes. Hope boxes contain mementos, objects, photos, letters, and others alike, all of which encourage a sense of hope and provide reasons for living (Joiner & Ribeiro, 2011).

Intimate Partner Violence

Intimate partner violence (IPV) is common in the United States, with nearly 31% of women and 26% of men reporting experiencing some form in their lifetime (Black et al., 2011). These estimates are not considered representative because of underreporting, leaving many cases undetected (Moyer et al., 2013). At the turn of the century, it was estimated that, globally, one in three women had been beaten, coerced into sex, or otherwise abused at some point during her lifetime (Heise, Ellsberg, & Gottemoeller, 1999). However, global and national data are very scarce, particularly in LMIC. Sexual violence has been used as a tactic of war in conflicts across the globe, including in Europe, Africa, the Middle East, and in the Americas. In the context of humanitarian crises and emergencies, civilian women and children are often the most vulnerable to exploitation, violence, and abuse because of their gender, age, and status in society (WHO, 2005). In addition to the context of war and violence, the WHO’s World Report on Violence and Health (WHO, 2002) identifies that violence perpetrated by husbands or male partners is “one of the most common forms of violence against women” (WHO, 2002, p. 87). This type of violence is harder to identify because it often happens within the home, can be highly stigmatizing to the family, and frequently occurs in contexts where legal systems and cultural norms do not treat any of these actions as a crime. The most severe outcome is death, along with a wide range of additional consequences, such as sexually transmitted diseases, unintended pregnancy, mental health conditions, substance abuse, and suicidal behavior (Letourneau, Holmes, & Chasedunn-Roark, 1999; Campbell, 2002; Golding, 1999). In HIC, recommendations include early detection using screening measures within primary health care as well as other settings (e.g., mental health, substance abuse) and several brief safety-focused interventions (Moyer et al., 2013). In LMIC, the provision of intervention programming for IPV is quite limited, although previous studies have found that effective mental health services can be implemented and show significant positive influence on mental health and functioning among victims of IPV (Bass et al., 2013).

Child Abuse and Neglect

Although prevalence rates vary widely, child abuse and neglect is a global public health problem with epidemiological studies showing higher occurrence rates in LMIC than in HIC (Reza et al., 2009; Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). From population-based studies around the world, about 20% of women and 5%–10% of men reported having been sexually abused as children (Finkelhor, 1994a, 1994b). There has been speculation that the perceived increase in child sexual abuse in sub-Saharan Africa may be linked to the spread of HIV. For example, children may be targeted by sexual predators because they are thought to be less likely to have HIV or even thought to be able to cure HIV or other diseases (Lalor, 2004). A recent study found that more than 90% of orphans or abandoned children from six sites (Cambodia, Cameroon, Ethiopia, India, Kenya, and Tanzania) experienced one or more traumatic events, with most children being physically or sexually abused (Whetten, Ostermann, Whetten, O’Donnell, & Thielman, 2011). There is a wealth of research on both physical and sexual abuse showing
that these events are linked to increased risk for physical, behavioral, cognitive, and psychological problems (e.g., Shonkoff & Garner et al., 2012; Stoltenborgh, Bakersmans-Kranenburg, van Ijzendoorn, & Alink, 2013; Stoltenborgh et al., 2011; Widom, Czaja, & Dutton, 2008). Research suggests that only a small fraction of victims of child abuse and neglect come to the attention of any child protection services—perhaps none in the many countries with no such services (Finkelhor, Lannen, & Quayle, 2011; Gilbert et al., 2009). Prevention of child abuse and neglect has become a significant focus for organizations such as the WHO (2012) and the U.S. Centers for Disease Control and Prevention (CDC, 2012) along with the development of evidence-based interventions to address prevention and treatment (WHO, 2002).

**IMPLEMENTING SAFETY PLANNING IN LMIC**

The literature on dissemination and implementation is exploding, with more and more guidance on how to take evidence-based practices (EBP) to real-world settings (e.g., Brownson, Colditz, & Proctor, 2012). A review by Powell et al. (2012) highlighted implementation strategies which have been used, some of which could be useful in addressing the barrier of implementing safety planning in LMIC. Several of this article’s authors (LKM, SS, JB) have been working with service providers in LMIC settings to develop safety plan strategies, including (a) involving patients/consumers, family members, and stakeholders; (b) developing education materials specific to safety; (c) conducting training on how to handle safety situations; and (d) providing ongoing consultation regarding the management of safety risk from both an expert and local perspective. The end goal is to develop a locally appropriate safety protocol to go along with a mental health service program that can be implemented by community-based mental health service providers to ultimately protect those in need. The specific safety protocol for each setting will vary depending on access to resources, location, and existing infrastructure. Once a protocol is developed, the service provider puts together a core team that is consulted for each safety issue incident. This team is constantly reevaluating the protocol and referral options and revising the safety protocol as needed. This could be conceptualized as similar to a Plan-Do-Study-Act (PDSA) cycle, which is used to gather information, evaluate it, and make appropriate changes in a systematic process (e.g., Langley, Nolan, Nolan, Norman, & Provost, 2009). The use of these implementation strategies is described in the following text.

**Involving Stakeholders and the Broader Local Community**

Because of the lack of existing infrastructure in many LMIC to adequately respond to the safety issues highlighted earlier, the local community is integral in creating new systems. Community meetings should involve as many local stakeholders and/or organizations that could help with safety issues, including (but not limited to) governmental departments (e.g., Ministry of Health), community leaders (e.g., elders, chiefs), respected religious leaders, existing mental health institutions (e.g., psychiatric hospital staff), police and law enforcement agencies, nongovernmental organizations (NGOs), and community organizations providing direct services to the population as well as consumers.

At these community meetings, an initial description of safety issues, such as suicide, IPV, and child abuse, will need to be provided because not all participants may be familiar with prevalence rates, risk and protective factors, and the unique challenges in serving individuals affected by these safety issues. Following this, a discussion is held with the community members on their perspective of any local resources that exist for individuals experiencing these safety issues. For example, there may be a local community “house” that is known for taking in children for a short time if they are being abused. A list is generated of existing local resources so that someone may
follow up to learn more about them and to ask whether they would be open to being included on a safety resource list. The community members are also engaged in brainstorming for other solutions, such as other local organizations (e.g., churches, NGOs), individuals (e.g., a local chief), and/or professionals (e.g., a psychiatrist or psychology professor based locally) who may become a resource. Again, a resource list is created and items are investigated as possible resources. Some resources are maintained based on their ability to provide service, some are discarded if they are no longer working in the community and/or are not providing services related to the safety issues, and some contacts lead to further solutions. The community members who are brought together as a group of local stakeholders can be expanded as more is discovered about the community.

After contact is made with every possible resource, a final list of community resource options for each of the safety concerns is created (see Figure 1 for an example). This list, which augments mental health or psychosocial interventions, will eventually be included in a safety protocol. Involvement of community members and key stakeholders continues throughout the implementation of any safety protocol to assist as challenges and barriers arise to problem solve, adapt the protocol, and help secure further resources. For example, if there has been a dearth of resources for physically abused women, another group meeting might be called to brainstorm additional resources for managing this type of safety concern. This may be formalized as a community advisory board, which is often used in randomized controlled trials.

Stakeholder and community involvement is an implementation strategy that provides access to the structures, systems, and personnel which currently exist in the community and allows for maximum use and benefit of safety protocols. The process of working with community members and stakeholders informs the safety protocol, strengthens communication and coordination of care among providers, aids in the creation of a referral network, and creates ownership of the local protocol. Buy-in from key stakeholders is also vital to the acceptability and sustainability of the protocol.

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**Example: Community Resource List by Safety Situation**

1. **Suicidal ideation with intent**
   - a. Referral to University Teaching Hospital (UTH), Clinic A, call (enter name) specifically to consult on the case (number . . .).
   - b. If the client is a female, contact Woman’s Organization B for possible placement in woman’s local community shelter.
   - c. If client is a male, contact Ministry of Health Clinic G for possible placement in their sick ward.
   - d. As a last resort option, refer to psychiatric hospital (except in cases of children younger than 18 years of age).
   - e. X is local school that children live at during the school year.

2. **Sexual abuse; abuser still living in the home**
   - a. Contact Child Protection Unit within police to notify them and allow for an investigation.
   - b. Churches X, Y, and Z—families are willing to house children for a short time.
   - c. Auntie or family member who lives nearby (Area X, number . . .)
   - d. Local community shelter X that houses sexually abused children for short amounts of time
   - e. If no placement, contact UTH Pediatric Center for Excellence for placement in the hospital.

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**FIGURE 1.** Sample community resource list.

*Note.* To maintain anonymity of local churches, school, and addresses, this example utilizes letters such as “X” to be placeholders for these actual names.
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of the safety protocol. For example, suicide and sexual abuse are often sensitive topics; therefore, advanced planning of how to handle such cases may alleviate resistance to implementation of EBPs to help maximally protect and treat individuals in need. Involving key stakeholders on the government level can also assist with the uptake of the protocol into national policy. Once in national policy, the prioritization of safety-related protection and activities is more likely to be realized.

Development of and Training on Safety Materials

When implementing mental health programs in LMIC, the lack of available mental health professionals results in a system of “task sharing,” in which individuals with little or no formal mental health training provide the direct mental health services in the community, hopefully supervised by individuals with greater mental health service capacity. For providers with little or no mental health experience, sometimes referred to as paraprofessionals, it can be stressful to interact with an individual who discloses suicidal ideation, violence, or abuse. Training materials developed for such paraprofessionals who will implement an EBP (assessment or treatment) should include (a) information on safety issues such as suicide, IPV, and abuse; (b) the role of service providers in prevention of and aid for safety-related issues, particularly the importance of asking directly about them; and (c) a complete step-by-step local safety protocol which includes supervision and wider community resources. Critical to training on safety matters is including behavioral rehearsal (Beidas, Cross, & Dorsey, 2013), or the continual practice of the new skill, because of the sensitivity of such topics. Training with role plays helps to reduce anxiety regarding the assessment and management of safety risk situations.

Information on suicide, IPV, and child abuse may include basic definitions, such as all the acts that may fall under child sexual abuse (e.g., touching, penetration) and for suicide defining those at highest risk (e.g., suicide ideation with intent, a plan, and access to lethal means). Prevalence estimates and information about local subpopulations at highest risk should be provided, if available. An interactive way to teach these topics is to organize an activity identifying myths and facts about each safety concern, having each paraprofessional review one with the larger group of community stakeholders as the group works to differentiate myths and facts.

The role of a counselor or assessor (someone who may administer a mental health assessment tool within the community) is very important. Especially in LMIC where task sharing is used, counselors and assessors are often those embedded within the community and familiar to the population. This is a true asset to addressing safety issues because this familiarity affords a level of trust which can encourage reporting of safety-related issues. Counselors and assessors should understand that a good approach to identify and prevent safety risks is to ask directly about them (Quinnett, 1999). Asking directly about safety issues is often not comfortable and can be especially unnerving for someone with limited mental health background. Thus, training should include a detailed “step sheet” for asking key questions about these issues at the assessment and at every counseling or treatment session, with regular role-play practice of this skill (see Figure 2 for an example of specific questions). Counselors and assessors also practice how to explain that these questions are routinely asked to everyone to maximize safety.

Developing a full safety protocol in LMIC is individualized to each site and program. Safety protocols vary depending on access to resources, location, and existing infrastructure. However, they should include several common elements: (a) how to assess risk, (b) how to identify warning signs, (c) how to help the client use their skills from the mental health or psychosocial program and/or their own resources, (d) how to implement immediate safety planning techniques (e.g., safety contract or safety watch), and (e) a clear order of contacts and documentation which needs to occur throughout the process. Figure 2 highlights the questions asked to assess risk. These questions are asked at every interaction with a client and reported to the supervisor. In
addition to listing the questions, rules should be written and training conducted on what a counselor should do if risk is found based on “yes” or “no” responses to each item (see Figure 3 for an example).

If only suicidal ideation is present, a counselor would move to identification of warning signs, help the client use their existing skills (if they have some), and/or implement immediate safety planning. This may include discussing situations that lead to such thoughts and/or working with the client using brief motivational skills such as cognitive restructuring to think in a different, more helpful way. In a case where an individual thinks of killing themselves, has a plan, and has the means to carry out this plan, a counselor would immediately call their supervisor and implement safety planning techniques, such as setting up a 24-hour watch (Stanley & Brown, 2012).

Finally, the implementing team follows a chain of contact for each type of case. Once a high-risk case is identified, a counselor is usually instructed to contact their clinical supervisor immediately. A phone consultation can help the paraprofessional (particularly those with limited mental health background) ask relevant questions to the client to determine level of risk for appropriate safety planning. The supervisor often also coaches the counselor through one of the safety planning techniques. The supervisor then communicates the occurrence of the safety issue and the steps taken to all the other relevant people within the service provider’s organization (see Figure 4 for an example flow chart from a RCT with local and international clinical partners.

**Figure 2.** Sample safety questions.
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involved). On a case-by-case basis, the counselor may be instructed by the supervisors to reach out to any one of the resources included on the list of community referral resources.

**Ongoing Case Consultation**

Each high-risk case needs to be handled in a personalized manner with consideration of the specific circumstances. Although certain procedures must be followed when working with high-risk cases (e.g., asking the safety questions, mandatory reporting of child sexual abuse), there is no prescribed formula a paraprofessional (assessor or counselor) can use for every client. When paraprofessionals have no or limited prior training in mental health, they may lack the ability to act on the spot in a flexible manner to adapt the safety protocol based on a client’s needs and situation. Thus, in addition to the initial call to the supervisor while sitting with a client who is considered a high-risk case, the counselor works closely with a team throughout the process of addressing a safety issue. These teams include the counselor and supervisors, along with others, such as local safety experts and leaders or stakeholders knowledgeable with local laws and systems. Each step is documented and sent through a line of communication including the consultation team to allow for feedback and ongoing adaptation of the plan.

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**FIGURE 3.** Sample guideline for suicide.

Evaluate suicidal ideation and ask the following:

- Are you thinking about killing yourself?
- Do you have a plan to kill yourself?
- Do you have access to that plan, in other words, do you have the means to execute your plan?
- Have you ever tried to kill yourself before?

**If the client answers yes to Questions A and B, C, or D, call your supervisor immediately, please! (Do not leave the individual.)**

**If the client answers yes but only to Question A and/or D, please move on to the review of steps at the end of this document. Call your supervisor at the end of session before you leave the individual.**

Talk to your supervisor while the client is still working with you. Decide and agree on a plan before the client leaves.

- The action plan could include the following:
  - Ask the client to promise verbally to keep himself or herself safe.
    - “We want to be assured that you are safe. I understand that this can be difficult. Can you promise me to keep yourself safe for a short period—at least until tomorrow?”
  - Establish a “security guard.”
    - “We want to help you stay safe. At times, we use family members to help us keep you safe. Can you think of someone in your family who could stay by your side?”
    - “Can we work together to get that family member to agree to stay by your side to keep you safe?”

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Figure 4. Sample of communication flow for safety risk situations.

Note. This safety flow chart was developed in partnership between Johns Hopkins University and the International Rescue Committee for a trial of Cognitive Processing Therapy in the Democratic Republic of Congo (Bass et al., 2013). Additional information on this project can be obtained from the third author (JB). APS = counselor; NGO = nongovernmental organization; CT = supervisor; CD = project director; PI = principal investigator.
Special Considerations

Paraprofessionals working with children need to be trained on specific techniques and steps for ensuring the safety of minors. For example, in most cases, an adult or guardian must be contacted and informed of the safety concerns. In addition to being a legal requirement in most countries, including most LMIC, it is also important to involve a guardian to assist in the safety planning and implementation when possible. Caregivers often generate valuable solutions to the safety issue, such as recommending a family member or friend who could watch a child and/or identifying triggers to the safety issue (e.g., child abuse) which help in creation of a safety plan. In some instances, a caregiver may be the perpetrator and contacting them may lead to increased safety risk for the child. In these instances, the consultation team, counselor, and supervisor would work together to find an alternate caregiver or another responsible adult.

STUDY EXAMPLES

Example 1: Psychometric Study on an Assessment for Adolescents—Zambia

Background. A study evaluating the psychometrics of an assessment tool for mental health, functioning, and HIV-risk behavior for orphans and vulnerable children (OVC) was recently completed in Zambia. The assessment was administered using the audio computer assisted self-interviewing (ACASI) system developed by Tufts University (n.d.; Tufts ACASI Systems), with assessors on-site to answer questions. Assessors in this study had varying levels of education, ranging from Grade 12 to undergraduate degrees, but all had little to no formal training in mental health. Assessors were hired based on (a) some understanding of research methodology, (b) possession of good supervisory and organizational skills, and (c) ability to speak and write in both English and one of the local study languages (Nyanja or Bemba).

A meeting with key local stakeholders and community leaders highlighted that there were no existing laws in Zambia which mandated providers to report clients with intent to harm or cases of abuse to the authorities or family members. In addition, no hospitals or residential settings existed that provided a high level of care for children or adolescents where, for example, they could be evaluated by a mental health professional and/or observed 24 hours a day if they are a danger to themselves. There were a few small shelters identified that could take children who had been abused. The local team agreed that none of the options identified were ideal for placement of an adolescent at risk of harming themselves, and the adolescent’s family and/or community were better situated to provide observation and appropriate care and support. The stakeholders generated a list of possible community resources outside of family/friends, including two police posts which handle child protection issues, five legal aid organizations, three community drop-in centers, five small community shelters/orphanages, one health clinic specifically for cases of child sexual abuse, three hospitals, seven HIV centers, seven hospices with pediatric centers, four social welfare organizations, four centers for people living with disabilities, and one 24-hour toll-free child hotline.

Stepwise safety procedures were developed and written in manual form, including questions and plans as shown in Figures 1, 2, and 3. For the study, 12 assessors and 2 supervisors were trained by the research team on the stepwise safety process and were provided the list of community resources. The research team put into place a collaborative team to deal with individual safety cases, which included two local supervisors who were previously trained in an EBT for trauma and experienced in implementing safety protocols from previous studies, one local psychologist based at the University of Zambia, one local psychiatrist based at the University Teaching Hospital, the mental health specialist for the Ministry of Health Zambia, two officers at the child protection
unit of the local police, one expatriate licensed level clinical social worker, and one U.S.-based clinical psychologist.

**Results.** Over the course of 7 weeks, 204 adolescents were screened using the study assessment measure; 61 (30%) said yes to one or both questions on the measure pertaining to suicidal ideation. (Adolescents: “In the past 4 weeks, I have thought about killing myself.” “In the past 4 weeks, I have deliberately tried to hurt or kill myself.” Caregivers: “In the past month, the adolescent with me today has been talking about killing self.” “In the past month, the adolescent with me today has deliberately harmed themselves or has attempted suicide.”) The ACASI system flags when this happens with either a yellow or a red flag, and the assessor (who is always in the room) immediately asks the safety questions and/or refers them to a counselor on-site who asks these questions (see Figure 2). During the face-to-face interview with an assessor, 24 of the 61 adolescents stated that they did not understand the question on the measure and answered incorrectly. Thirty-seven of the 61 adolescents said yes to having thoughts of suicide, 13 of these 37 also said yes to having a plan, 8 had means to implement that plan, and 8 had previously attempted suicide. The methods the adolescents described they would use included (a) rat poison \((n = 4)\), (b) overdose using medication \((n = 2)\), (c) using a knife \((n = 1)\), and (d) using fire \((n = 1)\). There were no cases of attempted or completed suicide in this study.

Regarding violence and abuse, 63 adolescents (30%) answered yes to ever experiencing being hit, kicked, or punched very hard at home (not including ordinary fights with brothers or sisters). Of those 63, 33 (52.4%) were female and 30 (47.6%) were male. There were 19 (9.1%; 12 female, 7 male) adolescents who reported that they had “an adult or someone much older touch their private sexual body parts or force sex on them.” There were 69 adolescents (32.9%) who reported either being hit/kicked/punched or experiencing sexual abuse; 13 (6.2%) reported both being hit/kicked/punched and sexual abuse. Of the caregivers, 37 (13.1%) answered positive to the adolescent having been hit, kicked, or punched very hard at home. Nine guardians (4.4%) indicated that they knew the adolescent had been sexually abused in some way. Finally, in response to the question, “In the last 4 weeks until now, I took out my anger and frustrations on my adolescent by scolding, shouting at, or beating him or her,” 48 (23.3%) responded never true, 39 (18.9%) rarely true, 56 (27.2%) sometimes true, and 63 (30.6%) almost always true.

**Case Example.** A 15-year-old female, Margaret (pseudonym), indicated yes to the ACASI assessment question on suicidal ideation. An assessor asked Margaret the four safety questions and probed for additional information with the help of the supervisor. Margaret reported that she had current thoughts about killing herself ever since her mother died. Margaret reported being HIV-positive and explained that she would take an overdose of her antiretroviral medications (ARVs). She stated that she had tried to kill herself in the past yet still thinks about “it” when she is at home alone. The assessor normalized these suicidal thoughts and feelings and explained the importance of meeting with the client’s caregiver to keep her safe. When the assessor asked permission from Margaret to share this information with her caregiver (her father), Margaret became very upset and refused to allow the interviewer to disclose this information to her father.

The interviewer was uncertain of how to handle the situation and contacted the supervisor again as instructed in the safety protocol. The supervisor joined the session in person and worked with the interviewer to probe and find out more about why Margaret did not want to share this information with her father. Margaret shared that she was afraid that this information would upset her father and as a result, she might be beaten. The supervisor identified that Margaret had now raised a second safety issue (abuse) and asked her the safety questions around child abuse to assess the level of physical abuse in the home. Margaret stated that the father did not beat her hard, but, as is common in Zambia, the father used spankings to discipline her. After explaining she was going to get additional information, the supervisor briefly excused herself from the room and contacted the case consultation team to discuss next steps.
During the case consultation with the project director, it was decided that the supervisor needed to take several actions. First, a child protection unit was contacted and notified of the situation. The responding officer determined that the case was of minimal risk but that they would follow up as needed with the family. Second, the case was discussed with the local expert on safety issues (found from the list of community resources) to obtain his recommendations. Consensus was reached among the consultation team that the supervisor would help the assessor set up an individual safety plan for Margaret. It was suggested that the supervisor ask Margaret if there was another person who also cares for her, such as an aunt or grandmother or neighbor. Ideally, the team suggested that both the father and another caregiver should be included in the plan. The project director helped coach the supervisor on how to talk with Margaret and her father through role-plays to assure development of a detailed safety plan as well as having discussion with the father about effective parenting techniques and the impact of corporal punishment.

The supervisor learned from Margaret that a neighbor sometimes cared for her and her siblings when the father was working and gave permission to discuss safety with both the father and the neighbor. The safety plan included (a) Margaret giving her safety “word” or promise that she would not try to kill herself in the next day, (b) the father and neighbor agreeing to take turns watching Margaret closely over the next 24 hours to assure her safety, (c) the father agreeing to hide Margaret’s ARVs and being responsible for administering her appropriate doses daily, and (d) the supervisor making an appointment to meet Margaret at the house the following day. During the follow-up visit, the supervisor reassessed Margaret’s current state by asking the four safety questions. Margaret was still thinking about killing herself but said she would not do it and did not have a plan. The supervisor reconfirmed Margaret’s safety promise and the safety watch (now increased to 48 hours). The supervisor also spent 20 min with the father asking about disciplinary actions he used and the effects these have on the child. The father admitted to sometimes spanking Margaret but was agreeable to limiting that, stating that he did not want to abuse his daughter. The family was also referred to a local psychosocial counseling center.

Example 2: Baseline Assessment of Randomized Controlled Trial for Mental Health Services for Female Survivors of Sexual Violence: Democratic Republic of Congo

**Background.** A randomized controlled trial of CPT for survivors of sexual violence (specifically rape) was conducted in rural villages in South Kivu province in eastern Democratic Republic of Congo (DRC; Bass et al., 2013). To identify those in need of this mental health service, a validated assessment tool was used to assess female survivors for mental health symptoms, which included two questions related to suicidal ideation: (a) “In the last 2 weeks, how frequently have you had thoughts of ending your life?” and (b) “In the last 2 weeks how frequently have you had thoughts about hurting yourself?” At the baseline assessment to determine study eligibility, all women who reported any level of suicidal ideation (i.e., responded to either of these questions with any level of affirmation) were asked the safety questions (Figure 2).

Local community and stakeholders’ meetings identified two organizations located in the main town of Bukavu providing services for adults in high-risk situations. However, the village sites where clients were located and where the study was being conducted were rural and were far away from Bukavu on poor roads. It was decided by the community that cases would need to be handled by the psychosocial assistant who was already located in the village and was a staff member of the local partner NGOs providing psychosocial and mental health care for survivors in each village, with help from community members and families. Very severe cases could be
referred to the main hospital in Bukavu which provided services for sexual violence survivors, but transportation and logistics would be burdensome so this was not seen as a strong solution. Assessors, the psychosocial assistants, and clinical supervisors were trained in the locally developed safety protocol and chain of communication (see Figure 4). The case consultation team consisted of two expatriate licensed social workers based at the headquarters in Bukavu, one local clinical director, two program directors for International Rescue Committee, two U.S.-based intervention trainers, one U.S.-based clinical psychologist, and the study principal investigator.

Results. Baseline assessments for the study occurred in 15 different villages resulting in 494 women assessed. There were 47 women (10%) who reported experiencing at least one of the two suicidal ideation questions in the previous 2 weeks. Of these 47, 33 had plans, 25 had access to means, and 25 reported a history of attempts. The most methods women stated using included drowning (plan \( n = 10 \), past attempt \( n = 8 \)), hanging (plan \( n = 8 \), past attempt \( n = 8 \)), rat poison (plan \( n = 5 \), past attempt \( n = 2 \)), battery acid (plan \( n = 5 \), past attempt \( n = 1 \)), knife (plan \( n = 2 \), past attempt \( n = 2 \)), overdose (malaria medication; plan \( n = 2 \), past attempt \( n = 1 \)), other form of poison (plan \( n = 1 \), past attempt \( n = 1 \)), jump in front of a car (plan \( n = 2 \), past attempt \( n = 0 \)), jump from hill/eff (plan \( n = 0 \), past attempt \( n = 1 \)), and starvation (plan \( n = 0 \), past attempt \( n = 1 \)).

Case Example. During the baseline assessments for eligibility, a 38-year-old woman named Cecilia (pseudonym) reported that she had thoughts of wanting to kill herself. The interviewer immediately contacted the supervisor, who was on-site as part of the study team, who then worked with the client to assess the level of suicide risk by asking the four safety questions. Cecilia reported that she had current thoughts of wanting to kill herself, had a plan to drown in the river by her house, and had tried to kill herself in the past by drowning but did not succeed because she was not weighted down properly.

As per the safety protocol, the supervisor on-site was to call the clinical supervisor at headquarters to discuss and develop an action plan. Unfortunately, lines were down and the radio was not going through to the NGO base, so the supervisor could not report the case to the consultation team. This was an issue that the study team had anticipated, and therefore, extra time was spent training the supervisors to be able to handle these cases as needed without assistance. The supervisor asked additional questions about triggers to her suicidal ideation (e.g., what times or situations make her feel more like killing herself), learning that Cecilia had these thoughts when she did not have money for food and when her children were hungry. The supervisor set up a safety contract wherein Cecilia promised not to hurt or kill herself in the next 24 hours. The supervisor also felt Cecilia needed someone watching her, and Cecilia was willing to include her father in her safety plan. The supervisor physically went with Cecilia to the family’s home and met with Cecilia and her father together. They were able to agree on a plan for safety watch where the father would be in the presence of the daughter for the next 24 hours. When the daughter was changing or using the bathroom, it was agreed that Cecilia’s sister would be present. The safety watch was reviewed with the family and then role-played so the family truly understood how closely they needed to watch Cecilia.

The supervisor went to their house and followed up with Cecilia and her father the next day to reassess suicidal ideation and extend the safety contract. The supervisor was able to send a text message via mobile phone to the NGO base to inform the case consultation team and update them on the case. After two follow-up visits with Cecilia, her risk had dropped with infrequent ideation and no plan. The family was also much more aware of Cecilia’s mood and continued to observe her more often. It was determined that the psychosocial assistant located in that village could take over monitoring of the case and would continue to inform the supervisor and consultation team. The supervisor returned to the NGO base to fully inform the case consultation team and report any feedback back to the psychosocial assistant.
**Example 3: A Randomized Controlled Trial of Trauma-Focused Cognitive Behavioral Therapy in Zambia With Children, Adolescents, and Families**

A safety protocol continues beyond an initial assessment or baseline measurement into the study or service project. A study evaluating the effectiveness of trauma-focused cognitive behavioral therapy (TF-CBT; Cohen, Mannarino, & Deblinger, 2006) for orphans and vulnerable children (inclusive of adolescents and caregivers) aged 6–18 years was recently completed in Zambia (Skavenski, Murray et al., 2014). Inclusion was based on a score of 38 or higher on the Posttraumatic Stress Disorder Reaction Index, which was locally validated (Murray et al., 2011a). Children and caregivers were assigned to a local counselor trained in TF-CBT via the apprenticeship model, which includes intensive ongoing supervision (Murray et al., 2011b).

**Results.** Eighteen high risk cases were identified. Although receiving treatment, 8 children reported suicidal ideation and a plan to carry this out. The plans were to cut wrist with a razor ($n = 2$), drink battery acid ($n = 2$), hang themselves ($n = 1$), throw themselves in a dam ($n = 1$), use a knife ($n = 1$), and throw themselves in front of a moving vehicle ($n = 1$). Of these 8, all but 1 had the means to carry out the plan, and 3 had previously tried to kill themselves. There were 5 children who indicated that they were being sexually abused. As an example of a success, in one case, the child moved in with an aunt temporarily while the family asked the abuser (a family member) to move out of the house. The abuser is no longer living in the home.

Unfortunately, however, there are also some cases which are not as successful. One incident was reported where a stepfather was the abuser, and in the end, the family relocated, and officials are still trying to track them down. Two children have reported homicidal ideation, one child reported wanting to kill another child, and one child was planning to strangle his brother. Three children reported physical abuse. In one case, it was a caretaker at a center, who was eventually terminated from their position. In another case, after investigation, the child was removed from the home and placed in a relative's care. In the third case, the counselor was able to contract with the family, follow up on site regularly, and work on positive parenting to eliminate the abuse.

**Challenges**

Challenges are to be expected when implementing safety protocols in LMIC which lack resources and mental health services. Logistical challenges include issues with transportation, space to conduct safety assessments and planning, phone access and connection, and/or coordination of services. For example, in DRC, ongoing violence prevented the teams from using roads on certain days, and phone networks were often poor, resulting in limited contact between those handling high risk–cases directly and their supervisor and case consultation team. Although not ideal, those working in rural areas received additional training to deal with these logistic issues and, over the course of the study, showed ability to handle all the cases listed earlier with no suicidal attempts.

Another challenge is staffing for the safety protocol, resource list, and consultation team and thinking through scope of work changes and/or compensation. Handling of high-risk cases can be intense and time consuming. Actions need to be taken immediately even if the timing is not “ideal” (e.g., someone is expected back in the office or would like to leave for the day). Support from management is also critical to encourage and understand the time commitment to such cases. Many of these challenges can be addressed if groups discuss them before any roll out of the safety protocol occurs. For example, the group may brainstorm possible problems and directly ask those involved in the safety protocol, wider resource list, or consultation team what their concerns are.
**DISCUSSION**

Although high-risk cases exist in any setting, working on the mental health issues of populations exposed to and at risk for violence are likely to illicit concerns about safety. It is widely known that safety issues such as suicide, IPV, and abuse are largely underreported and/or ignored. Barriers to understanding or treating safety issues often arise from two circumstances. First, personnel (e.g., staff, lay counselors, assessors in a study, community volunteers) are not trained on how to address safety. When personnel are not trained to ask, it frequently results in them not taking the initiative to do so on their own, and therefore, safety issues go unnoticed and/or unreported. Secondly, there is a lack of capacity to handle high-risk cases on both an individual and macrolevel. In most LMIC, there are limited personnel trained in treatments for clients with higher level risks such as suicidal thought and intent. This results in a fear of asking about safety because they do not know how to help or do not have the capacity to help. On a government and/or organizational level, if policies are introduced requiring providers to ask clients about safety issues, the system may face a need that far exceeds the capacity. In addition, laws and resources that do exist are often hard to find, disjointed, and/or not well coordinated. In the case of child abuse, there may be no laws on mandated reporting, as well as understaffed or underresourced abuse-focused systems. The lack of skill and resources with which to address safety issues such as suicide, IPV, and/or abuse could prevent organizations from not only refraining from asking direct questions about safety, but even avoiding working with such populations.

Safety issues as a possible barrier to implementing EBP (assessment and/or treatment) in LMIC is one that we feel can begin to be addressed with relevant implementation strategies (Powell et al., 2012). The implementation of safety protocols, as described earlier, has been demonstrated to be feasible in LMIC when a stepwise process is followed. With training, the community can be equipped to handle most high-risk cases without higher level infrastructures, such as psychiatric inpatient hospitals or highly trained personnel (e.g., psychiatrists). In settings where the authors have implemented such safety protocols, there were no suicides, and all safety concerns were addressed by a counselor or staff trained in the protocol and the community.

**FUTURE DIRECTIONS**

In settings where access to mental health treatments is limited, having training in brief crisis interventions such as safety plans may be especially useful (Stanley & Brown, 2012). The anecdotal results from the studies presented suggest that safety protocols are needed, feasible, and accepted in LMIC. As global mental health continues to grow as a priority in LMIC and EBPs are recommended, it will become increasingly important that all mental health service providers include an integrated and comprehensive safety planning component. Safety protocols that are integrated as standard of care within all health systems could help prevent and mitigate the consequences of suicide, IPV, and child abuse. Personnel working with at-risk populations should be required to have basic training in how to ask about high-risk situations and how to address those situations using a safety protocol. Implementation research clearly shows that support by governments and organizations is critical (e.g., Aarons, Wells, Zagursky, Fettes, & Palinkus, 2009). In LMIC, support in the form of official policies, as well as changes to job descriptions, such that providers are mandated to identify and address safety issues among clients, will be essential to facilitate the use of safety plans.
NOTE

1. All case studies have been altered and pseudonyms are used to protect confidentiality.

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Empirically Supported Treatments: Dissemination Practices in Impoverished Regions

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A growing understanding of the implications of childhood psychopathology has driven the dissemination of empirically supported treatments (ESTs). This has not been the case in countries with high rates of poverty and violence—where the need for ESTs is fundamental. In this article, we examined the current status of child psychopathology and mental health services for children in El Salvador to explore key factors that can improve dissemination of ESTs in middle- and low-income countries. In El Salvador, children are constantly exposed to risk factors related to childhood disorders (e.g., violence), and there is an increase in the demand for mental health services for this population. However, a lack of a guiding policy and formal training has led to few psychologists using ESTs. A scientist–practitioner model to guide formal education and training of mental health providers would be the first step to improving the dissemination of ESTs in El Salvador.

Keywords: empirically supported treatment; dissemination; El Salvador; childhood; psychopathology

The effort to provide effective mental health treatments has driven the field of psychotherapies for decades. Stemming from the evidence-based movement that started in the United Kingdom (Chambless & Ollendick, 2001), one of the first official attempts was carried out by the American Psychological Association’s Division 12 Task Force on Promotion and Dissemination of Psychological Procedures established in 1995. Their work (e.g., Chambless, 1996; Chambless & Hollon, 1998) promoted the dissemination of empirically supported treatments (ESTs) through a three-pronged approach. First, it promoted the establishment of concrete guidelines to evaluate if an intervention is empirically supported; second, it advocated the importance of scientifically guided knowledge in clinical settings; and third, it encouraged EST training for mental health practitioners.
Almost two decades later, research on ESTs for different childhood psychopathologies has significantly advanced. Progress in this field has put forth new programs and specific techniques for specific childhood problems, increased knowledge about applicability in culturally diverse settings, and highlighted moderators of treatment outcome (Weisz & Kazdin, 2010). Important steps are continuously being taken to promote empirically based treatments. However, advancements in this field have taken place primarily in the United States, Australia, and Europe. Dissemination of evidence-based practices has not reached emerging regions where it is significantly needed. Countries where children are exposed to a vast range of risk factors associated with childhood psychopathologies, especially violence and poverty, lag behind in the application of ESTs.

El Salvador, located in Central America, is part of the developing countries situated in the lower middle-income range according to the 2010 World Bank report (data from the World Health Organization [WHO], 2011). The high rates of violence and poverty expose a large percentage of El Salvadorian children to a wide range of risk factors associated with childhood mental health disorders (e.g., domestic violence, abuse) needing the dissemination of ESTs. Extensive evidence has accumulated indicating the effectiveness of diverse psychotherapeutic interventions in improving mental health outcomes for children and adolescents (Ollendick & King, 2004; Weisz & Kazdin, 2010); now, the challenge lies in those interventions being implemented, especially in at-risk areas such as El Salvador.

In the area of mental health services for children, the need for empirically based interventions not only becomes evident but also becomes a fundamental necessity. Not only is there a high rate of mental health problems that warrant immediate care, but also the lack of resources, policies, and support for families and children create a demand for delivery of effective interventions accessible to most of the population. Throughout this article, the dissemination of ESTs in El Salvador will be discussed through a critical analysis of the current situation concerning the nature of mental health problems in childhood and adolescence, the mental healthcare delivery services, the current efforts of dissemination of ESTs in El Salvador, and future directions that will address the problems encountered in dissemination.

**Nature of Mental Health Problems in Children and Adolescents in El Salvador**

Child mental health problems have an estimated worldwide prevalence that ranges between 12% and 28%, according to the Pan American Health Organization (Organización Panamericana de la Salud [PHO], 2001). Specifically in Latin America and the Caribbean, the prevalence appears to range between 12.7% and 15% according to data from 2008 (PHO, 2009).

There are no current data on the prevalence of childhood psychopathology in El Salvador. Although mental health problems have started to generate traction in El Salvador, there has not been a formal undertaking of mental illness within the overall health policies in the country. An officially approved mental health policy exists and was recently revised in 2010 (El Salvador’s Ministerio de Salud Pública y Asistencia Social [MSPAS], 2010). This policy, however, neither indicates a mental health plan nor does it specify a course of action to implement the objectives it states. In addition, there are no legal regulations that provide a framework through which this mental health policy can be established in El Salvador; as the WHO has described, in El Salvador, a “dedicated mental health legislation does not exist and legal provisions concerning mental health are not covered in other laws (e.g., welfare, disability, general health legislation)” (WHO, 2011, p. 1).

El Salvador is an economically unstable region with high rates of poverty and violence (Naciones Unidas, 2010; Naciones Unidas: Programa para el Desarrollo, 2010; The World Bank, 2013) and susceptible to natural disasters such as earthquakes and floods. This particular context...
leads to a wide range of mental health problems in childhood and adolescence. Studies carried out in populations which have experienced disasters show a high symptom prevalence of psychiatric disorders (Fairbank, 2008). Furthermore, general population studies in the United States show that traumatic life events (such as violence) are associated with both externalizing and internalizing disorders (Copeland, Keeler, Angold, & Costello, 2007). In El Salvador, two of the most common reasons for referral for childhood mental health service seem to be behavioral problems at school and child abuse. Problems at school usually involve overt disruptive behaviors in the classroom, whereas referrals regarding child abuse include emotional, physical, or sexual abuse. However, because no data is available on epidemiology of childhood psychological disorders, it is difficult to assess which mental health problems in childhood warrant more attention. Nonetheless, we could expect a very high prevalence of childhood disorders and functional impairment in El Salvador considering that poverty is a risk factor that increases vulnerability to develop a psychiatric disorder after a traumatic event (Copeland et al., 2007).

Although there is no accessible epidemiological data, anxiety-related problems appear to be increasing among children and adolescents in the region. Traumatic life events, especially threatening events, are precursors of anxiety disorders (Beesdo, Knappe, & Pine, 2009). In El Salvador, a large percentage of children and adolescents are exposed to a traumatic experience, especially to violence, either as direct victims or as witnesses to violence. The prevalence of child sexual abuse before age 15 years in El Salvador is estimated at 6.4% (Speizer, Goodwin, Whittle, Clyde, & Rogers, 2008). Likewise, there is a high prevalence of domestic violence in the country (Naciones Unidas, 2010). Children are exposed to a high number of stressful life situations without proper access to services which promote protective factors and resilience. Many vulnerable children in El Salvador are exposed to situations deemed threatening (e.g., abuse, floods, theft, shootings). Although traumatic life events are associated to a wide range of childhood mental health problems, events interpreted as threatening are highly correlated with anxiety-related problems (Beesdo et al., 2009).

Prevalence of disruptive behaviors in relation to delinquency and gang membership also seem to be escalating, especially in poverty-stricken areas. There appears to be a large percentage of children in at-risk areas who meet criteria for externalizing behavioral disorders, although resources for formal evaluation and diagnosis are not available. Many inherent cultural factors in El Salvador exacerbate the risk of developing delinquent behaviors, for example, oppositional defiant disorder (ODD) and conduct disorder (CD). Coercive patterns and harsh, inconsistent discipline are all well-evidenced risk factors for CDs (Frick, Christian, & Wooton, 1999; Lahey, Waldman, & McBurnett, 1999). These behaviors and attitudes are commonly present in parental upbringing patterns in El Salvador. Physical punishment, for example, is a frequent disciplinary method in El Salvador (Speizer, Goodwin, Samandari, Kim, & Clyde, 2008). Furthermore, poverty increases family stress and in many cases leads to broken homes. It is common for one of the primary caregivers to leave the country, especially for the United States, in hope of economic stability. Grandparents or other family members usually take care of the children whose parents have left, increasing the number of nonintact families and in some cases leading to dysfunctional families.

Lack of adult supervision and monitoring is itself a significant risk factor for the development of disruptive behavior disorders (Frick et al., 1999). In Central America, gangs have also become a pervasive social agent in childhood and adolescence, especially in light of unstructured families in low-income areas (Maclure & Sotelo, 2004). With gang membership starting at an early age, children engage in antisocial behaviors which increase the chances of developing a CD diagnosis.

Regrettably, there is no data on rates of prevalence of childhood mental health problems or epidemiological information to accurately determine the current status of childhood psychopathologies and mental health in El Salvador. Although there is agreement that effective intervention in childhood reduces the costs to health systems and society (Morris et al., 2011), from a
governmental stance, the major concerns and target areas in mental health are violence and substance abuse in the adult population (MSPAS, 2010) with little to no funding reserved for child mental health.

**Mental Healthcare Delivery Services for Children and Adolescents in El Salvador**

Currently in El Salvador, there is an increasing demand for child mental healthcare services. Data shows that for lower middle-income countries (including El Salvador), the median treated prevalence for children and adolescents is 205 per 100,000 of the child/adolescent population (Morris et al., 2011). In the United States, the treatment rate for psychological disorder in children and adolescents is estimated at 50.6% (Merikangas et al., 2010). In addition to low treatment prevalence rate, the services provided in El Salvador are not guided by theoretical and empirically grounded data. Research on incidence and prevalence of child psychopathologies is almost nonexistent, and there is no objective data regarding the main problems in mental health in children and youth in El Salvador.

Likewise, there is no information on mental health services provided to children and adolescents. The services that are provided are not designed to take into account the prevalence of disorders in the general population, the etiology of these disorders, the risk factors associated, or a developmental psychopathology perspective. Furthermore, the current mental health policy is informed by data taken from the adult population, from sampling following particular crises that arise (e.g., an increase on the murder rate of a particular geographical area or a natural disaster), and from political factors; it is not based on scientific sampling procedures.

In addition, the area of mental health care is neglected and underfunded in El Salvador. In fact, only 1% of El Salvador’s national healthcare budget is designated for mental health (MSPAS, 2010). A 2005 study conducted in El Salvador (MSPAS, 2010) found that there are only 49 ambulatory centers dedicated to mental health, from which only 1% of resources are dedicated to children and adolescents. There is only one mental health hospital in the country, and one mental health wing in Instituto del Seguro Social, a hospital accessible only to tax payers (MSPAS, 2010). The WHO’s most recent research in the region estimates 10 mental health outpatient facilities in El Salvador (WHO, 2011). This indicates a service access ratio of 0.16 per 10,000 of the population for outpatient facilities and 0.02 per 10,000 for mental health hospitals. Furthermore, there is no information on how many of those facilities or beds in the facilities are reserved for children and adolescents (WHO, 2011).

Currently, El Salvador has undertaken reforms to include community-based psychological services and incorporate mental health into primary care (Caldas de Almeda & Horvitz-Lennon, 2010). However, there is a limited amount of mental health services to which children and adolescents can have access to in the public sector. As described earlier, the governmental services offered either through community settings, outpatient facilities, or hospitals are insufficient.

There is also a disjointed delivery of services that include government units, not-for-profit organizations, and private clinics (WHO, 2010). Apart from the few government resources in the public sector, different not-for-profit organizations (i.e., FUNTER, Teletón) have established different centers to provide mental health services for children and adolescents. These organizations provide services for families in the middle-low to low socioeconomic status (SES) levels, and usually the cost of services are free or very low. In the private sector, families can access services by accessing private practicing psychologist and/or psychiatrists, and the price range and service provided varies significantly between practitioners. There is no governmental or private health-care policy that provides funding for families accessing psychological mental health services.
outside of the government agencies. Therefore, families have to cover the expenses for these services “out-of-pocket.” Consequently, services will most likely be received by families who have the economic resources to pay for them. Nonetheless, because there is no regulation on the provision of mental health services, the type of services provided and the personnel qualification in organizations can vary.

The absence of a regulating policy for mental health services is one of the main drawbacks in the delivery of services. The lack of evidence-based policies that regulate mental health care undermines the delivery of appropriate services, especially for children and adolescents. Efforts to meet the demand are guided by personal criteria on strategies to use on the cases referred. A lack of common goals and policies, as well as communication between entities providing mental healthcare services, leaves little room for proper dissemination of ESTs.

Even within governmental services, there is no unified protocol to guide the delivery of mental health services. For example, in spite of the current mental health legislation and the move toward establishing psychological centers in schools by the Ministry of Education, there are few schools who promote mental health (MSPAS, 2010). In fact, in middle- to low-income Latin American countries, only 1% of schools have one or more mental health professionals present (Morris et al., 2011). Likewise, there are no guidelines on governmental entities that provide mental health services for children, and there is no available data on protocols followed or types of services provided. An example is the work carried out by the institution responsible to work with children who are removed from abusive homes, the Salvadorian Institute for the Integral Development of Children and Adolescents (ISNA, Spanish acronym for Instituto Salvadoreño para el Desarrollo Integral de la Niñez y Adolescencia). There is no current protocol on assessment or intervention with children who fall under ISNA’s care. There is no policy on what type of treatment will be delivered to children and parents for family reintegration to occur. Psychologists have to rely on their own judgments, techniques, and protocols, and these might differ substantially from practitioner to practitioner and may not adhere to best practice.

The shortage of mental health professionals who can provide adequate services for children and adolescents is also a common factor that hinders delivery of mental health services in middle-to low-income countries in Latin America (Morris et al., 2011). Mental health services for children and adolescents in El Salvador are provided usually by psychologists and psychiatrists. Psychologist work would range from assessment and diagnoses to therapy, counseling, and social work. To be a certified licensed psychologist in El Salvador, the requisites are the completion of a 5-year undergraduate program in psychology in a national university recognized by the Ministry of Education. Licensed psychologists can work in clinical, educational, or any mental health area without any further specialization. Renewal of a license is yearly and is not conditional to continuing education courses but available by payment of a yearly renewal fee.

The formal educational system and training for mental health providers in El Salvador poses fundamental problems for the dissemination of ESTs. A licensed psychologist does not need specialization to provide mental health care. In fact, there are no clinical-developmental psychology programs in El Salvador. There are only two graduate programs in clinical psychology in El Salvador, both at master level, and neither of these programs has been designed in line with theoretical guided model for psychological practice (e.g., scientist–practitioner model, Boulder model, Vale model, or scientist-practitioner-advocate model).

In addition, although El Salvador’s Mental Health Commission suggests that one of the strengths of the mental health system relies on ongoing education and training for providers of mental health care (MSPAS, 2010), research shows otherwise. In the data gathered in 2009, Morris and colleagues (2011) found that in lower middle–income countries (including El Salvador), the median percentage of mental health staff that undergoes refresher training courses in mental health in a 2-year period is 2% for psychiatrists; 0% for nurses; and 5% for psychologists,
social workers, and occupational therapists. The training received by mental health providers in El Salvador does not follow an evidence-led educational model. As a personal experience, from all the students taught at master level and different workshops (all licensed psychologists), none have heard the term EST or have had formal training on ESTs.

**ESTs in El Salvador**

The likelihood of accessing ESTs in El Salvador is low. The lack of clinical practice of ESTs in El Salvador originates from problems inherent to dissemination (see Messer, 2004; Ruscio & Hololan, 2006) and to specific factors in El Salvador. On one hand, ESTs are not an established guideline for clinical psychology services. On the other hand, the few providers of ESTs work in the private setting and might charge well above the economic means of the general population. Furthermore, it is frequent for dissemination efforts to lose precedence over specific and contextual crisis response intervention.

There are many aspects that intervene in the process of dissemination. To guide the research on dissemination, Silverman and Kurtines (2004) have proposed the breaking down of dissemination into three processes: (a) **Diffusion** entails delivering general information about ESTs into clinic settings; (b) **targeted dissemination** involves the distributing of targeted information about ESTs into the clinic settings. This is done through manuals, protocols, and/or training on specific ESTs; and (c) **implementation**, which consists of the change of clinical practices to incorporate ESTs into daily practices. We explore these three processes to analyze the dissemination of ESTs in El Salvador.

Diffusion can be achieved through didactic and practical training regarding ESTs as Herschell, McNeil, and McNeil (2004) propose. Training clinicians who provide mental health care to children offers an excellent opportunity to disseminate information on ESTs (Herschell et al., 2004; Woody, Weisz, & McLean, 2005). In most middle- to low-income countries, the training provided for mental health care is inadequate (Morris et al., 2011). In El Salvador, there is no model that guides the education and practice of mental health services (e.g., clinical psychology, social workers). There is also no official specialization in the field of child mental health. As a result, there is a high demand for continuous learning by psychologists and other mental health workers. Many courses are offered to psychologists—unofficial and official—to meet this demand. However, few are grounded in evidence-based practices. Aside from university-established courses, there is no regulation of courses offered; thus, anybody can design and provide workshops regardless of quality. Practitioners and institutions may choose courses and workshops based on arbitrary reasons. Usually, cost-time-benefits are the primary reasons for choosing a course. A regulating policy, such as the one established by the American Psychological Association regarding continuous education credit, could improve this area (see Herschell et al., 2004, and Woody et al., 2005).

With this goal in mind, we have tried to follow a science–practitioner model in the master’s program in clinical psychology given at Universidad José Matías Delgado. Having been a consulting member in the review of their clinical psychology master’s program, we focused on trying to address the gap between research and clinical practice. Our aim is for students to develop the skills to use empirical evidence to guide their treatment decisions in clinical settings. In addition, we have included, within some of the courses, specific education on the scientist–practitioner model and ESTs. Two courses in the program are focused on clinical-developmental psychology, although the program is not solely clinical developmental in nature. We have designed these two courses to provide training following the scientist–practitioner model. In the first course, *childhood psychopathology*, the scientist–practitioner model is the guiding structure through which students...
can build the bridge between research and practice in the area of child mental health. The childhood psychopathology paradigm provides the perfect framework so that students understand how clinical work in mental health can only come from a thorough understanding of research-based developmental psychopathology. The assimilation of a scientist–practitioner model (from which the Boulder and Vale model stem) increases the probability of clinicians choosing and incorporating ESTs into their work. The second course on evaluation and treatment with children and adolescents provides specific didactic teaching on ESTs.

Although the courses are set up to promote the diffusion of ESTs, because of the costs and lack of funding, they are not very accessible to most mental health professionals in El Salvador. There is no funding through scholarships or student loans for psychologists in El Salvador. None of the universities offering the master’s programs offers scholarships to students and most foundations that offer loans focus on undergraduate education. Thus, most of the students need to work while enrolled at the master’s program to cover the costs. The master’s programs, in short, demand significant financial and time resources. Apart from lessons, students have to do related coursework and, for some courses, carry out practical hours. Having to carry a full-time job in addition to the academic program is not possible for many psychologists. In addition, because psychologists can legally practice after an undergraduate program, the motivation for such intensive specialized training is undermined.

Considering the low accessibility of master’s programs, another channel through which diffusion can be achieved is by designing courses and training for psychologists through not-for-profit organizations. Courses can be shorter in duration and with reduced costs. An example is the work of Fundación Pro Educación de El Salvador (Salvadorian not-for-profit organization), which offers a 6-month course entitled Psychotherapy With Children and Adolescents. The course has been designed to address the scientific–practitioner model through a developmental psychopathology perspective and provide an introduction to ESTs. Theoretical introductions to these models are covered, and a wide range of techniques that stem from different ESTs are presented throughout the course.

The goal of diffusion of the scientist–practitioner model and evidence-based practices through graduate and continuous education is twofold. First, we consider that knowledge about ESTs will increase awareness, from an ethical and practical stance, of the benefits of using ESTs. Second, we anticipate that appreciation of the benefits of using ESTs will increase the likelihood of psychologists using EST criteria when choosing further training. As more psychologists become aware of ESTs through general diffusions, the foreground is established to move to the following processes: targeted dissemination and implementation.

A setback in these attempts to disseminate ESTs has been the absence of supervised training on specific ESTs. For example, because of different constraints, including time, costs, university regulations, and others, no formal training on ESTs for childhood psychopathology is carried out during the master’s program or in the 6-month course on psychotherapy with children. All courses require practical hours in which the students provide therapy to children or adolescents. Then, the students also have to fulfill supervision hours during which discussions about their cases take place. However, training on a specific EST following an EST protocol or manual has not been possible; because the student body is formed by already licensed psychologists (with most already working in mental health services), the programs do not take into account supervised internships. The formation of clinical and research partnerships, as suggested by Herschell and colleagues (2004), could provide the perfect opportunity for the practical training on ESTs. Because institutions carrying out courses for psychologists do not have the resources to provide supervised internships, a liaison with already established clinics or psychologists could develop that area.

Following Silverman and Kurtines’ (2004) description, for dissemination of ESTs, all three interrelated phases of dissemination must be targeted. The second and third phases, targeted
Dissemination and implementation, cannot be achieved if diffusion is not addressed. It is anticipated that motivation to work on targeted dissemination and implementation might increase once the importance of ESTs is understood. Targeted dissemination is extremely difficult in non–English-speaking countries. Not only is research mostly published in English, but also the materials of ESTs are usually in English. So far in El Salvador, clinicians will invest their own time into translating and adapting the material of different ESTs into their practices. This creates a problem regarding validity and reliability. As Ruscio and Holohan (2006) have questioned, how much can be adapted from a treatment before it stops being a valid EST?

Furthermore, in some cases, procedures to carry out a proper adaptation and validation are almost impossible. Adaptation and validation require resources not readily accessible in middle-to low-income countries. First and foremost is the need for translation of protocols, manual, and assessment measures for treatment. Next, training needs to be established and carried out by an expert who also needs to provide supervision even once direct training has finished. These factors demand economic resources that are not readily available in countries such as El Salvador. In addition, because a scientist–practitioner model has not been established in the field of clinical psychology, the motivation to undertake this type of research projects is limited.

Published and accessible research in other languages could improve the dissemination of ESTs in countries with low economic resources for mental health. Authors of different ESTs could update information on adaptation and validation of their manual and interventions on their websites. Sometimes, researchers have undertaken investigations within their research teams that have not been published in peer review articles but are part of their internal documentation. Providing access to these resources could improve the targeted dissemination process in countries or areas where proper adaptation and validity studies are unrealistic because of cost barriers.

Regarding the third phase of dissemination, implementation, an important obstacle is the rigid methodological protocol of studies on ESTs that create a strict, exclusion criteria and use of manuals. In countries such as El Salvador, children are exposed to a wide array of risk factors, which sometimes leads to misattribution of causal and maintenance factors. Considering the lack of specialization in the field of child mental health, both at policy and education levels, practitioners in El Salvador have to address a whole array of childhood psychopathologies (from autism to ODD to bullying). Specific ESTs’ design for one type of symptomatology might not translate well into clinical settings. As it has been extensively described (Herschell et al., 2004; Ruscio & Holohan, 2006; Wolfe, 2006), in clinical settings, complex cases might not adhere to a well-defined Diagnostic and Statistical Manual of Mental Disorders diagnosis or the characteristics for which and EST has been developed. A clinician might feel at a loss of how to implement ESTs with such cases and might consequently completely drop the use of an EST. This also might influence the type of training clinicians will pursue. They might not feel motivated to get training on an EST because the costs (time and money) surpass the benefits (small percentage of cases).

**Future Directions**

Regarding the delivery of ESTs in El Salvador, there are important factors to consider. Primarily, adequate education and training of mental health practitioners needs to be established. Both general education on ESTs and supervised training need to be instituted because they are considered main aspects of dissemination (Schmidt & Taylor, 2002; Silverman & Kurtaines, 2004; Woody et al., 2005). However, to encourage education and training grounded on evidence-based practices, a regulating policy for clinical practice needs to be established. The regulating policy needs to stem from empirical research and should be based on a scientist–practitioner model. The setup
of a policy would promote and drive the modifications in education and training needed for the first stage in dissemination.

In the second place, manualized treatments are an excellent strategy for the second phase of dissemination of ESTs in El Salvador. They could improve targeted dissemination and training. Manuals enable standardization of procedures and targeted diffusion of features that have already been established as effective and efficient. Furthermore, they facilitate the implementation of ESTs in diverse settings. Manuals can also reduce the cost of implementation in public and private clinical settings. Funding for mental health care for children and adolescents in El Salvador is almost nonexistent. Empirically supported training protocols (Herschell et al., 2004) are expensive because there is constant training and supervision to make sure the treatment adheres to the protocol. Manuals help establish the validity of the protocols as because they guide each part of the intervention. However, for manuals to be useful in the dissemination process, they must be accessible in different languages; include information on specific, nonmodifiable components linked to the effectiveness of the treatment; and include guidelines on how to intervene with complex cases. These factors would help psychologists who might not receive constant training and supervision to follow an EST adequately and not abandon it altogether. Manuals need to include this information to aid in the process of implementing treatments in diverse cultural settings. Likewise, manuals need to be more readily accessible for a wider range of populations. As an example, the Coping Cat program (Kendall & Hedkte, 2006) is an empirically supported intervention manual for anxiety in children which is readily available. In El Salvador, however, this manual would only be available for a small number of clinicians—those who have the economic (to access online shopping) and educational resources (i.e., bilingual).

Furthermore, more research on community-based interventions and inclusion of information about diverse populations including complex cases (Herschell et al., 2004; Ruscio & Holohan, 2006) needs to be carried before implementation attempts can be fully effective. It has been argued that ESTs focus on symptoms that adhere to clear-cut diagnoses and not to underlying causes (Wolfe, 2006). This makes it difficult to decide what EST to follow for complex cases (Herschell et al., 2004), which are usually the norm in countries such as El Salvador. Inclusion of data which comes from community-based samples and from the implementation phase will provide insight into how to deliver ESTs in at-risk setting where multiple risk factors including lack of economic resources and appropriate infrastructure limits the way an EST might be implemented. In addition, ESTs’ research on symptoms and not on diagnoses might be useful to provide information on how to proceed with comorbid disorders and when there is limited information about background, family, and developmental history, which hinder a proper diagnosis.

From our work in El Salvador in clinical settings and in teaching and training, it becomes evident that comorbidity, complex cases, and a diverse interplay of risk factors are the norm rather than the exception. Understanding the local situation is key factor in the dissemination of ESTs (Messer, 2004). Research in community settings can shed information which can guide psychologists trying to implement ESTs in their local contexts. In the particular case of El Salvador, there is very little funding directed toward mental health services, and none is being geared toward delivery of ESTs to children and adolescents. However, we know that is also a common trend for a wide array of communities, even in developed countries. Information on how to implement ESTs would facilitate the proper allocation of resources.

Implementation of ESTs can be a very expensive endeavor. One of the few studies publishing information on implementation of ESTs (i.e., Schmidt & Taylor, 2002) describes the need for available funding for the materials, training, and constant consulting. Although the protocol developed from a local context is very different from the one in El Salvador, it presents key features that will aid in the implementation process. Schmidt and Taylor (2002) point out the key role of an innovator as an essential feature in the implementation process. The innovator is the liaison
between the mental health service and the chosen EST. They recommend this role to be taken by an external figure to the mental healthcare center. The funding for the allocation of the innovator would probably come from the mental healthcare center that wants to implement an EST, which can become an obstacle in middle- to low-income countries. In fact, our previous work in implementation of ESTs in school-settings in Spain (unpublished) revealed that without an appointed figure that fulfilled all the characteristics of an innovator as described by Schmidt and Taylor (2002), implementation efforts were not successful.

Partnerships between institutions that provide psychological services and organizations that provide training could be the bridge toward the implementation of ESTs. Psychologists being trained in ESTs, for example in university master’s programs, can act as innovators by carrying out and implementing an EST in a clinic setting for their supervised internship, practical hours, or thesis research. These partnerships do not need to be solely based within El Salvador’s geographical area. The benefits of mass communications could facilitate the partnership between diverse regions. Partnerships between diverse regions could in turn stimulate multicultural research on ESTs. Information on targeted dissemination and implementation phases could be more easily accessed and contextual variables could be taken into account.

It is important to take into account, however, that the concept of a mental health center is not fully developed in El Salvador. In the private sector, most clinicians work in individual private clinics, and in the public sector, health centers usually include one psychologist and one psychiatrist. Consequently there is lack of incentive and lack of funding for an innovator.

**Conclusions**

The efficacy and effectiveness of ESTs are well-established for the treatment of many childhood psychosocial problems. Research is also establishing processes and key features of therapy that increase effectiveness in natural scenarios, where risk factors are interplaying simultaneously. However, the gap between the scientific evidence and the application of the ESTs in clinic settings across different populations still needs to be addressed. Theory and research in the three phases of dissemination is crucial. This can guide clinicians on the essential aspects that need to be adopted in clinical settings. Currently in El Salvador, we are focusing on the dissemination aspect of the ESTs. Because the scientist–practitioner model becomes embedded in the psychologist clinical practice philosophy, targeted dissemination and implementation can be addressed. Research on childhood mental health in the country, modification of manuals and protocols concerning language and other contextual factors, and building partnerships between research and clinical settings to address funding issues are the next issues to be addressed in targeted dissemination and implementation of ESTs.

**References**


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Pediatric obsessive-compulsive disorder (OCD) is a prevalent condition that responds well to specialized treatment including cognitive behavioral therapy (CBT) or serotonin reuptake inhibitors or their combination. In Brazil, the dissemination of evidence-based treatment for pediatric OCD is hindered because of the peculiarities of the health system. The presence of a multitiered health system (public, insured, and private) with insufficient investment in public mental health and relative inaccessibility of insured/private care for most of the Brazilian population make the implementation of specialized OCD treatment centers largely unavailable in Brazil. Furthermore, lack of appropriate training in child mental health, CBT, and evidence-based approaches to OCD in current psychiatry and psychology training programs further impede improvement in diagnosis and treatment. The challenges faced in the current system in Brazil will be discussed and also strategies and programs that are currently being implemented in the south of Brazil to help address the gaps in treatment for pediatric patients with OCD.

Keywords: pediatric OCD; evidence-based treatment dissemination; CBT; Southern Brazil

Obsessive-compulsive disorder (OCD) is a common neuropsychiatric illness with frequent onset in childhood. Obsessive-compulsive symptoms commonly begin in adolescence with 10%–25% of adult patients with OCD reporting onset of symptoms between the ages of 10 and 14 years and up to 50% reporting onset by the age of 18 years (Flament et al., 1988; Fullana et al., 2009; Ruscio, Stein, Chiu, & Kessler, 2010; Vallen-Basile et al., 1994; Zohar et al., 1992). However, many OCD-affected children and adolescents wait years before an appropriate diagnosis is made. The average time to diagnosis is estimated to be 10 years (Pauls, 2008). Epidemiological data from different international, nonclinical, youth populations reveals lifetime prevalence rates of OCD ranging between 1% and 3% (Apter et al., 1996; Flament et al., 1988; Heyman et al., 2003;
Maina, Albert, Bogetto, & Ravizza, 1999; Valleni-Basile et al., 1994; Zohar et al., 1992), and although no similar epidemiological studies have been performed in children and adolescents recruited from the community in Brazil, similar rates are expected based on the worldwide prevalence.

The treatments of choice for pediatric OCD include cognitive behavioral therapy (CBT) and serotonin reuptake inhibitors (SRI; American Academy of Child and Adolescent Psychiatry [AACAP], 2012). The use of CBT alone or an SRI alone are significantly superior to placebo in reducing pediatric OCD severity, but a combination of CBT and SRI was demonstrated to be superior to either CBT or SRI alone (O’Kearney, Anstey, & von Sanden, 2006; Study, 2004). More recent studies have indicated a better response to CBT alone than to SRI alone (O’Kearney, 2007; Watson & Rees, 2008). Evidence has shown that the CBT-SRI treatment combination results in 53.6% clinical remission in youth suffering from pediatric OCD (POTS Team, 2004).

Although OCD is prevalent in adolescence and commonly persists across the lifespan (throughout adulthood), it frequently goes undiagnosed and untreated, despite being highly treatable. Epidemiological data from a U.S. national survey has shown that approximately two-thirds of adults with moderate to severe OCD had not received specific treatment for OCD (Ruscio et al., 2010). Similarly, the vast majority of adolescents identified by international community surveys as having OCD reported being previously undiagnosed and untreated (Apter et al., 1996; Flament et al., 1988; Heyman et al., 2003; Maina et al., 1999; Valleni-Basile et al., 1994; Zohar et al., 1992). Furthermore, a time lag from the onset of symptoms to receiving specific treatment for OCD has been demonstrated in adolescents as well. For example, in an epidemiological study of obsessive-compulsive symptoms in nonreferred adolescents in the United States, only 3 of the 18 cases identified with OCD were receiving current psychotherapy despite an average of 3 years since onset of OCD symptoms (Flament et al., 1988).

The failure of prompt identification and specific treatment for OCD is unfortunate because a more chronic and debilitating course of OCD is characteristic of cases that are left untreated (Micali et al., 2010; Stewart et al., 2004). The delay in identification and absence of specific treatment may be influenced by many factors including insufficient specialized OCD-related training among clinicians, lack of OCD awareness campaigns, and embarrassment to spontaneously report OCD symptoms. To help address these factors, several initiatives combining the efforts of researchers, clinicians, and society in general are being developed to help OCD sufferers all around the world (www.ocdfoundation.org).

Despite the advances in OCD research including contributions from Brazilian researchers, there is still considerable room for investigation and improvement in the delivery of treatment in pediatric OCD in Brazil. For example, more detailed information regarding prevalence rates of pediatric OCD, how long from onset of symptoms to formal diagnosis, types of treatment offered and most used, and general accessibility to specialized treatment remain to be investigated. This article will discuss the approaches which have been used, challenges, and future directions for the dissemination of evidence-based treatment for pediatric OCD in the southern region of Brazil (composed of the states of Paraná, Santa Catarina, and Rio Grande do Sul). In this context of dissemination of evidence-based treatment for pediatric OCD, the particulars of the Brazilian health system and the training in psychiatry and in psychology in Brazil will also be discussed.

**Problems With Mental Healthcare Delivery in the Region of Interest**

**The Brazilian Health and Mental Health Systems**

In Brazil, health services are offered both by the public health system and by the private sector, the latter being represented by health insurance companies and private care (Centro
The public health system, or Brazilian Unified National Health System (“Sistema Único de Saúde” [SUS]) aims to provide universal health services for the entire Brazilian population of 190,732,694 people (Brazilian Institute of Geography and Statistics [IBGE], 2010). The SUS is mainly financed by federal funds (approximately U.S. $15 billion in 2005; Paula, Lauridsen-Ribeiro, Wissow, Bordin, & Evans-Lacko, 2012) with an additional transfer (minimum 12%) from municipal and state taxes to health care (http://portalsaude.saude.gov.br/portalsaude/arquivos/pdf/2012/Set/28/Basedecalculoaplicacaominimaemsaudae.pdf). It is not clear how much of the money spent on public health care in Brazil is specifically designated for mental health, but it is likely only a small fraction of the total.

In the Brazilian public health system, mental health care is expected to be provided by integrated primary and specialized healthcare services (Brasil Ministério da Saúde, 2004). In primary care, family doctors, nurses, social workers, and pharmacists offer health promotion and therapeutic interventions. It is expected that psychiatrists and psychologists should offer guidance to primary care professionals in their actions toward mental health promotion; however, this knowledge translation ultimately depends heavily on the local structure including the number of specialists hired by the SUS, their level of training, and their clinical demands. Brief interpersonal psychotherapies, problem-solving therapy, CBT, and prescription of psychiatric medications can be offered by primary care services (Gonçalves, 2011), but most primary care teams often have not received formal training in psychotherapy or psychopharmacology.

Specialized mental healthcare services include (a) outpatient clinics and (b) the Psychosocial Community Care Centres (“Centro de Atenção Psicossocial” [CAPS]). The specialized outpatient psychiatry and psychology clinics in the SUS system are expected to assist cases which are mild or moderate in terms of severity but not easily followed in primary care. Cases that are complex or persistent should be followed at CAPS. In the south of Brazil, the clinical demand in the specialized mental health outpatient clinics is very high and therefore faces several challenges. For instance, there is one SUS Child Psychology outpatient clinic in Curitiba (capital of the state called Paraná) that has employees hired from SUS (not under contract with private care), in which the time allocated per session is 30 min including electronic charting time and the average availability for each patient is two sessions per month (L. Savaris, adjunct director of mental health at Ministry of Health Municipality of Curitiba, personal communication, August 13, 2013). In Florianópolis (capital of the state called Santa Catarina), there is no similar outpatient clinic and all the cases are seen at the primary care or at CAPS, which are considered key units according to Brazilian mental health policies (Brasil Ministério da Saúde, 2004). The SUS system mandates that CAPS which assist exclusively children and adolescents are separate from CAPS devoted to adult populations. In the Brazilian public system, severe cases of pediatric OCD are expected to be seen at a CAPS location for children and adolescents, whereas mild and moderate OCD cases are expected to be seen in the outpatient clinics or primary care units.

Although the Brazilian mental health system is integrated with SUS around the entire country, unequal distribution of resources among different regions of Brazil makes access to care a significant challenge for many children and adolescents with mental health problems, including OCD (Paula et al., 2012). For instance, a common situation is that a Brazilian family of lower income cannot afford the absence from work (even when justified to accompany a child on a medical appointment) or the cost of (sometimes daily) public transportation for a parent and affected child to visit a CAPS. Public mental health services dedicated to children and adolescents are scarce even in large cities in Southern Brazil. For example, Florianópolis (capital city of the state of Santa Catarina) has more than 433,000 inhabitants (IBGE, 2010) and has only one CAPS that assists children and adolescents (http://www.saude.sc.gov.br/geral/planos/programas_e_projetos/saude_mental/endereco_caps.htm). Similarly, Curitiba (the capital of the state of Paraná)
and Porto Alegre (the capital of the state of Rio Grande do Sul) each have only two CAPS that assist children and adolescents with mental disorders for populations of approximately 1,760,500 and 1,510,000 people, respectively (IBGE, 2010). This is alarmingly lower than what is recommended by Brazilian Mental Health Federal Program that encourages one child and adolescent CAPS for each 200,000 inhabitants (Paula et al., 2012). In this sense, Couto, Duarte, and Delgado (2008) suggest that increasing the number of CAPS unit and outpatient clinics specialized in children and adolescents is a major challenge for the Brazilian Public Mental Health System. This challenge is worsened by the fact that there is a scarcity of psychiatrists and psychologists specialized in child and adolescent mental health currently working in the Brazilian public system (Paula, Zaqueu, Thais, Lowenthal, & Miranda, 2011).

Another option for assessing and treating OCD within the SUS system would be within primary care settings; however, Brazilian studies (Paula et al., 2011; Tanaka & Lauridsen-Ribeiro, 2006; Tanaka & Ribeiro, 2009) suggest that many primary care professionals are not adequately qualified to deal with child and adolescent mental health issues. Furthermore, primary care professionals in the public system face a daily high clinical demand from patients of various ages in Brazil, and the system itself restricts their ability to focus their practice and additional training exclusively to children and adolescents (Paula et al., 2011).

Outside the Brazilian public system, Brazilian families may opt to seek treatment via health insurance or private care; however, the private health programs in Brazil also suffer from several weaknesses. Health insurance companies in Brazil are regulated by National Health Insurance Agency (“Agência Nacional de Saúde”), which mandated in 2008 that health insurance companies had to provide psychotherapy sessions as a benefit to subscribers. However, these companies are only obliged to provide 12 sessions of psychotherapy per year, per client, and only if the psychotherapy is recommended by a physician (Centro de Estudos e Pesquisas de Direito Sanitário Cepedisa, 2009). This limitation raises concerns regarding the number of CBT sessions suggested by international protocols or required for complex pediatric OCD cases which can easily surpass 12 sessions per year (AACAP, 2012). Furthermore, private care is inaccessible for the great majority of the population because it is unaffordable to most Brazilians. These issues significantly limit the private health industry coverage of mental health problems in children and adolescents in Brazil, especially those that may require continuing attention as pediatric OCD.

To put the discussed issues specifically into the context of the dissemination evidence-based for pediatric OCD particularly discussed in this article, considering an international prevalence rate for pediatric OCD of 1% and the youth population living in the city of Curitiba (from 5 to 19 years of age; 381,553 individuals; IBGE, 2010), it would be expected that 3,816 young individuals would develop OCD in Curitiba. Taking into consideration that Curitiba does not have a public clinic specialized for the assessment and treatment of OCD (either for adults or for children and adolescents), the diagnostic and treatment options for these young individuals affected with OCD and their families would include (a) a mental health professional in the public system, (b) an OCD specialist affiliated with a health insurance company, or (c) private care. Only about 25% of the Brazilian population has private health insurance (http://www.brasil.gov.br/sobre/saude/atendimento/plano-de-saude-privado) and few have the financial resources to afford private care, meaning that approximately 70% of the population must rely solely on the resources of the public system.

**Accessibility to Psychologists and Psychiatrists in Brazil**

In addition to the aforementioned challenges associated with the structure of the mental health system in Brazil is the issue of access to mental health specialists with a sufficient level of training...
who are crucial to the delivery of evidence-based treatment for pediatric OCD. There is a scarcity of mental health providers in low- and middle-income countries as demonstrated in a recent study on 58 countries (Bruckner et al., 2011). In Brazil, according to data from the Federal Council of Psychology, there are 216,000 registered psychologists, which is far superior to the number of registered clinical psychologists in the United States (93,000; http://www.apa.org/support/about/psych/numbers-us.aspx#answer; Conselho Federal de Psicologia [CFP], 2012). Despite the high numbers of psychologists, there are two main problems for the dissemination of evidence-based treatment for pediatric OCD. First, there are only 27,229 psychologists working in the public health system (http://tabnet.datasus.gov.br/cgi/tabcgi.exe?cnes/cnv/prid02br.def). In the states of Paraná, Santa Catarina, and Rio Grande do Sul, of all psychologists, only 14.15%, 12.64%, and 12.81%, respectively, worked in the public health system (Associação Brasileira de Ensino de Psicologia [ABEP], 2006). Second, psychology training in Brazil is criticized for not adequately preparing professionals for working in the public health system (Dimenstein, 1998; Paula et al., 2012) and for not emphasizing child mental health (Paula et al., 2012) or CBT skills (Neufeld, Xavier, & Stockmann, 2010).

Psychiatrists are one of the least accessible professionals in the Brazilian public health system and scarce throughout the country (Mateus et al., 2008). The total number of general psychiatrists in Brazil is 7,558 (Conselho Federal de Medicina [CFM], 2013) but a much smaller number work in the SUS following the same trend for physicians in general in the country. For example, in the capitals of the three southern states, the number of physicians per inhabitants is (a) 5.7/1,000 in Curitiba (10,073) with only 1/1,000 employed by the SUS; (b) 7.7/1,000 in Florianopolis (3,299) with 1.5/1,000 employed by the SUS; and (c) 8.7/1,000 in Porto Alegre (12,335) with 2.9/1,000 employed by the SUS (CFM, 2013). Nationally, there is only 1 psychiatrist per 75 primary care centers. The scenario is even worse for child and adolescent psychiatrists because there are only approximately 350 in the entire country, and although the number of child and adolescent psychiatrists who are working for SUS is not available by national reports, it is known to be much smaller (Moraes, Abujadi, Ciasca, & Moura-Ribeiro, 2008). The WHO recommends 1 child psychiatrist for each 30,000 children and adolescents (World Health Organization, 2005). In Brazil, child psychiatrist coverage is 20 times lower than this recommendation (1 child psychiatrist for every 621,504 individuals). The shortage of psychiatrists and psychologists working in the public system, compounded by the scant number of those specifically trained in child and adolescent mental health and CBT, makes this a challenging problem to overcome because it involves issues encompassing specialized training, psychotherapy theoretical models, and clinical protocols which will be discussed further.

**Efforts for Addressing These Issues**

**Special Concerns Related to Delivery and Modifications**

*Child and Adolescent Psychiatry Training and Certification in Brazil.* The shortage of child and adolescent psychiatrists combined with high clinical demand has had an impact in psychiatric training in Brazil. There are 15 training programs in child and adolescent psychiatry accredited by the Ministry of Education in Brazil, but the exact number of subspecialists who graduate per year is not available (Moraes et al., 2008). Furthermore, national statistics information following up their training such as how many successfully graduate, the type of work they are officially registered (private practice only, SUS, academia), who received training in psychotherapy, whether the psychotherapy training included CBT, or how intensive the training was are
not formally available. The accredited programs in child and adolescent psychiatry in Brazil are of 1-year duration and are available for physicians who completed an accredited 3-year program in general psychiatry. The Brazilian Psychiatric Association recommends a minimum curriculum for the general psychiatry program ("Programa Mínimo para Residência de Psiquiatria," www.abp.org.br), but a minimum core curriculum for child and adolescent psychiatry program has not been officially developed or implemented in all programs.

In terms of specialty and subspecialty certification, a physician who successfully completes a residency program which is accredited by the Ministry of Education is not required to challenge a specialty examination because the specialty certification is granted upon successful completion of the residency program. However, a psychiatrist who did not complete a residency program in psychiatry is also allowed to challenge the specialty examination in psychiatry or in child and adolescent psychiatry. For candidates who have not formally attended a residency program in psychiatry or in child and adolescent psychiatry, they are required to prove sufficient experience in the area before challenging the exam. For example, in child psychiatry, a letter stating that the candidate has been clinically following children and/or adolescents for their mental health problems for a minimum of 2 years, in either a public or private setting, would be required for challenging the subspecialty examination (http://www.abp.org.br/portal/educacao/provadetitulo) without any requirements for a minimum number of patients or proof that the physician has sufficient experience in all areas of a specialty. In contrast, countries such as Canada require the completion of a competitive 5-year residency program in general psychiatry followed by a 2-year subspecialty in child and adolescent psychiatry, with mandatory written and practical competency examinations at the end of each program, and a physician who did not complete a residency program is not allowed to challenge either the specialty or the subspecialty examinations.

Another difference from North America is the requirement for continuing medical education (CME) in Brazil. In 2012, the National College of Physicians ("Conselho Federal de Medicina" [CFM]) changed their role of regulating a mandatory minimum number of CME credits per 5-year cycle to keep a specialty certificate status to solely giving incentive for doctors and specialists to acquire CME and passed on the responsibility to each specialty association but with no clear rules of continuing regulation (http://www.abp.org.br/portal/educacao/certificacao). The particulars of the Brazilian system aforementioned (length and minimal curriculum of training in child psychiatry, eligibility for specialty license in child psychiatry, and regulations for CME in child psychiatry) contribute to making challenging the implementation of evidence-based practice such as establishment of clinical protocols for assessment and treatment of pediatric OCD including guidelines for CBT training because of the lack of accountability in the training pathway.

The shortage of child psychiatrists combined with high clinical demands (pressure on service delivery) seems to have impacted postgraduate medical education and licensing in child psychiatry in Brazil. For instance, the main objective of the specialty examination in child psychiatry is that the psychiatrist is competent to diagnose and to prescribe safely and appropriately. Similarly, the curriculum of the 1-year residency programs in child and adolescent psychiatry generally focus on child development, diagnosis and differential of major mental disorders of childhood and adolescence, and their associated psychopharmacological treatment. Training on effective psychotherapy interventions is a small part of the curriculum, and CBT training, for instance, is not part of all residency programs. This reality is unfortunate because evidence-based psychotherapies, including CBT, are quite effective for disorders and problems which are highly prevalent during childhood and adolescence—such as anxiety, specific phobias, OCD, behavioral problems, depression, and school refusal.

**Child and Adolescent Psychology Training and Certification in Brazil.** Psychotherapy interventions are often delivered in Brazil by psychologists (Paula et al., 2011; Ronchi & Avellar,
2010); however, their use of evidence-based approaches in the care of children and adolescents diagnosed with OCD are hindered by several issues. Brazilian psychology programs are entered after high school, offered by universities or colleges, last between 5 and 6 years, and are full- or part-time (Hutz & Gomes, 2013). To legally act as a psychologist in Brazil, one must complete an accredited psychology program and maintain a current registration with the Brazilian Board of Psychology (CFP; Hutz & Gomes, 2013). Contrary to North America, in Brazil, a master’s or a PhD degree is not mandatory to practice psychology. In the south of Brazil, there are 92 universities or colleges that offer psychology programs (http://emec.mec.gov.br/). Although the Brazilian Ministry of Education periodically evaluates these programs, “this assessment is poor and there is a great variation in quality of training offered by several universities” (Hutz & Gomes, 2013, p. 98). Psychology programs in Brazil aim to prepare professionals to act in different areas; however, they had been criticized to not adequately prepare students to work in the public health system because they traditionally emphasize clinical models oriented to assist patients from medium and higher social classes in individual and long-term private care (Dimenstein, 1998; Paula et al., 2011; Vieira & Oliveira, 2012; Zurba, 2012).

Furthermore, general bachelor's level training does not completely prepare a psychologist to develop an area of expertise (such as CBT) and does not cover enough material on child mental health in Brazil (Paula et al., 2012). Data also suggest that some psychologists may finish their undergraduate programs without basic notions of CBT. Neufeld et al. (2010) accomplished a survey with psychology programs in Paraná, aiming to investigate if and how CBT courses were offered. Their results indicated that 44.4% of the universities and colleges assessed did not present any CBT course in their curriculum.

Professionals interested to learn more about child mental health or CBT can seek a clinical psychology postgraduate program, some of them being recognized by the Brazilian Association of Psychology Teaching (ABEP; http://www.abepsi.org.br/) and issuing the title of clinical psychologist, although it is not mandatory to have the title to work as one in Brazil. In the south of Brazil, there are 34 clinical psychology postgraduate programs that are recognized by the Brazilian Association of Psychology Teaching (http://www.abepsi.org.br/), but only three are on CBT. These CBT programs comprise at least 600 hours of training, including theoretical classes and supervised practice, but do not target specifically child and adolescent psychotherapy (www.wpcentrodepsicoterapia.com.br; www.infapa.org.br). There are five postgraduate programs in clinical psychology in the south of Brazil that specifically target child and adolescent psychotherapy but are based on psychoanalysis and gestalt therapy (not CBT). Because postgraduate courses are not mandatory for a psychologist to work in the private care or in the public health system, it is possible that many psychologists who work with children or adolescents diagnosed with OCD have limited knowledge and skills in CBT, child mental health, or public health. A study performed with professionals working at a pediatric CAPS emphasized the interviewees’ lack of training and skills in child mental health (Ronchi & Avellar, 2010).

**Barriers**

CBT techniques are not widely provided by psychiatrists in the south of Brazil, and many factors have contributed to this reality including the aforementioned issues regarding training commitments to areas nonrelated to psychotherapy interventions; very large patient numbers; and multiple, high clinical demands focusing on severe and persistent mental disorders. These factors have resulted in psychiatric services—provided by SUS or by insurance companies—that mainly deliver diagnostic assessment, with clinical management focused on risk management and psychopharmacotherapy when appropriate. As a result, psychologists and other members of the multidisciplinary team have often become the main practitioners delivering psychotherapy interventions.
Psychoanalysis has had a great influence in Brazilian society, and the use of this approach is predominant among Brazilian psychologists (Dimenstein, 1998; Hutz & Gomes, 2013), even more especially in the south of Brazil because of its proximity with Argentina (Nunes, Campezzato, Cruxén, & Savalhia, 2006). This preference is a major barrier for the dissemination of evidence-based treatments for pediatric OCD in Brazil. Research about evidence-based therapies is growing in Brazil but is still insufficient (Hutz & Gomes, 2013). Many studies about evidence-based treatments for children or adolescents diagnosed with OCD or anxiety disorders published in Portuguese review and discuss international studies (Gomes et al., 2011; Petersen, 2011). Questions about the suitability and cultural adaptations of the international models to the Brazilian reality may hinder the confidence of some Brazilian professionals to use them. In this context, the effectiveness of CBT protocols for treatment of children and adolescents with OCD and anxiety in Brazil is of extremely value and have been demonstrated (Asbahr et al., 2005; de Souza et al., 2013).

Another barrier for the professionals who work in the public system and are interested in CBT is that the acquisition of specialized training involves the practitioner completing an expensive—both in terms of time and money—postgraduate course. Issues such as low remuneration, moonlighting, and high workloads (Cotta et al., 2006; Valla, 1999) make it difficult for professionals to seek additional training which could improve the quality of their practice.

Success

Although the psychoanalytical approach is prevalent, CBT is starting to expand in Brazil (Hutz & Gomes, 2013). There are still few clinical psychology postgraduate programs in CBT that are recognized by Brazilian Association of Teaching Psychology but none in CBT with children and adolescents. In Brazil, there are other options of postgraduate programs in psychotherapy where the title of clinical psychologist is not granted upon completion; nonetheless, they help improve knowledge and skills. For example, in Porto Alegre, there are programs in CBT with children and adolescents such as Family Institute of Porto Alegre (“Instituto da Família de Porto Alegre,” www.infapa.org.br) and “Núcleo de Estudos e Atendimentos em Psicoterapias Cognitivas” (http://www.neapc.com.br/index.php?option=com_content&view=article&id=47&Itemid=232) consisting of 360–384 hours. There are also shorter programs that target child and adolescent CBT only, such as the Friends for Life Workshops. These, among others, are the options available to psychologists interested to improve their knowledge in child and adolescent CBT in Southern Brazil.

New guidelines intended to address some of the criticisms of current psychology programs have been proposed by Brazilian Ministry of Education in 2011 (http://portal.mec.gov.br/index.php?option=com_content&view=article&id=12991). The model of a general psychologist who is able to work in all different settings still remains; however, new guidelines propose psychology programs to be divided into two phases with one encompassing basic knowledge and skills necessary to all psychologists and one focusing on specialized areas of psychology such as research, education, management, health promotion, clinical psychology, or psychological evaluation. The new guidelines also aim to improve the training of psychologists to make them more suited to work in the public health system (Zurba, 2012), and the Brazilian Ministry of Health has encouraged the creation of postgraduate programs in public health (Gil, 2005; Nascimento & Oliveira, 2010).

Given the lack of child and adolescent psychiatrists in Brazil, initiatives to expand and improve child psychiatry training programs and to optimize existing human resources are essential to improve the country’s child and adolescent mental healthcare capacity. In this regard, task forces have called for increased numbers of child psychiatrists in Brazil (Moraes et al., 2008). New initiatives to build residency programs as partnerships between SUS and universities are
starting, such as a recently funded residency program in family medicine and application for another one in psychiatry to begin in 2014, both in Curitiba (L. Savaris, adjunct director of mental health at Ministry of Health Municipality of Curitiba, personal communication, August 13, 2013). In terms of optimizing existing human resources, workshops on pediatric OCD for mental health professionals who work with children and adolescents in the SUS but lack expertise on treating pediatric OCD are being developed, for example, as a result of a partnership between the Brazilian Association of Neurology, Child Psychiatry and Associated Professions (“Associação Brasileira de Neurologia, Psiquiatria Infantil e Profissões Afins,” http://abenepipr.com.br/) and the Ministry of Health in the Municipality of Curitiba, where mental health professionals from the SUS will attend a series of in-service training sessions to improve their knowledge and clinical skills with OCD patients (L. Savaris, adjunct director of mental health at Ministry of Health Municipality of Curitiba, personal communication, August 13, 2013). These are examples of some local actions in the south of Brazil that are helping to disseminate specialized knowledge in pediatric OCD and CBT to primary care professionals and mental health professionals who are not specialized in children or CBT.

Given the scanty time designated specifically to the assessment and treatment of pediatric OCD in both psychology and psychiatry programs in Brazil, initiatives involving the improvement of training at all levels and the development of research focus on this area are vital to the dissemination of evidence-based treatment of pediatric OCD in Southern Brazil. In this regard, it is important to highlight some of the initiatives among Brazilian academic scholars to translate and validate instruments to help more systemically assess OCD and anxiety symptoms (Asbahr, 1998; DeSousa, Petersen, Behs, Manfro, & Koller, 2012). However, despite the public availability of OCD instruments, they are not routinely used in private practice or in the SUS. This resistance may be related to indiscriminate (without considering clinical context) use of questionnaires and/or lack of familiarity and appropriate training with their use to recognize advantages such as efficient screening, standardized assessment, and objective monitoring of severity. Furthermore, self-rated scales can not only save valuable clinical time of clinicians who are overwhelmed by clinical demand at SUS but also provide objective evidence of clinical outcomes that could be readily used in service audit and clinical review by government agencies. Other internationally used instruments are not available (i.e., not translated and validated) in Portuguese, and further research investigating the validation and best use of these clinical tools in Brazilian scenarios is needed. Similarly, the effectiveness of international CBT protocols for pediatric OCD and anxiety in Brazil are extremely valuable for the dissemination of evidence-based treatment, and advances in this regard have been made by Brazilian researchers (Asbahr et al., 2005; de Souza et al., 2013).

**Future Directions**

Human resources for mental health are inadequate in many developing countries requiring substantial investments and effective strategic policies implementation where mental health specialists have essential roles in delivery of services and in training of nonspecialist workers (Kakuma et al., 2011). Many professionals working in the public health system in Brazil do not have sufficient levels of training to successfully deliver pediatric OCD treatment recommended by current guidelines (AACAP, 2012), but primary care professionals and psychologists and/or psychiatrists with less specialized training in this area could have their broad mental health training upgraded by capacity building initiatives. Thus, with additional continuing training, the availability of well-prepared professionals who work at SUS and assist children and adolescents with OCD (in terms of screening, assessment, or treatment) could be increased. Also, short specialized training in CBT for pediatric OCD by internationally renowned scholars, such as the 3-day intensive training course in CBT for mental health professionals who are treating individuals with OCD (http://
www.ocfoundation.org/btti.aspx), would be ideal opportunities for clinical psychologists and psychiatrists.

The creation of a pediatric OCD clinic in the public system in large cities where these services are not available would help in improving many issues discussed in this article, including dissemination of CBT techniques specific for OCD and implementation of international protocols of assessment and treatment for OCD. Furthermore, a specialized OCD clinic would provide an environment where psychiatrists and psychologists would have the appropriate clinical supervision and access to ongoing specialized training in this area. Most CBT-trained practitioners in Curitiba—whether physician or psychologist—are not integrated into training settings but are in clinical services (mostly in private practice), thus reducing the formal and informal dissemination of necessary clinical skills in psychotherapy interventions. Trainees become the trainers of tomorrow, and the lack of current access to training in pediatric OCD is likely to become self-perpetuating. The possibility of training both psychologists and psychiatrists in a specialized OCD clinic would be very opportune considering the lack of local expertise in this area. However, an OCD specialized clinic requires funding and political approval and moreover to win an entrenched public health counterargument against specialized clinical services (in this case, specific to OCD) where the prevailing mentality is to offer the full range of general services at each location to reach most of the population improving accessibility. In support of having specialized clinics in pediatric OCD with highly trained teams are several successful established centers located outside (e.g., Vancouver, Canada, http://www.bcmhas.ca/ProgramsServices/ChildYouthMentalHealth/ProgramsServices/PediatricOCDProgram; Los Angeles, USA, http://www.uclahealth.org/) and inside Brazil (e.g., São Paulo, http://www.protoc.com.br/; Porto Alegre, http://www.hcpa.ufrgs.br/content/view/528/768/). With the development of specialized centers in pediatric OCD within the public system, more psychologists and psychiatrists could collaborate and build expertise under ongoing supervision with experienced professionals, which would also alleviate the smaller number of existing child psychiatrists in Brazil and help with providing and expanding effective assessment and treatment of pediatric OCD in the region. Specialized clinics could develop partnerships with academic centers to help with specific training in CBT and child mental health for psychology and psychiatry professionals in training.

A major hurdle in the public health system is the level of remuneration for specialists because psychiatrists and psychologists can make much more money in private clinics in Brazil. A public system that is more financially rewarding and includes career development programs would be imperative to motivate recruitment and retention of highly trained individuals in the public health system. In addition to the training of professionals, awareness campaigns about pediatric OCD targeted to the general public are also essential to help in increasing the recognition of OCD and engaging members of society who could help in different capacities to orchestrate academic, clinical, and government initiatives, ultimately helping disseminating evidence-based treatment for pediatric OCD in the south of Brazil.

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Delivering Interventions to Young People Exposed to War-Related Violence and Sexual Exploitation: Longstanding Struggles but Lasting Successes

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This article outlines the impact of conflict and war-related sexual exploitation on young people’s mental health and explores some of the predisposing factors which contribute to this psychological distress. It then outlines how a lack of valid measures of psychological distress, limited research, diverse services, treatments and cultural practices, previous trauma, and a multitude of competing agencies can hamper mental health delivery in war-affected countries before explaining how using non-Western measures of distress, extensive preresearch preparation, cultural respect tinged with scepticism, a duty of care, and involving stakeholders in decision-making can mitigate these problems. Lastly, this article outlines one study that overcame the logistical, security, and educational challenges of service delivery and calls for further research on psychosocial interventions, dismantling studies of cognitive behavioral therapy (CBT) interventions, and hybrid inventions which target both mental health and psychosocial need and fruitful partnerships between academic institutions and civil society organizations.

Keywords: war-affected youth; sexual violence; mental health and psychosocial interventions; trauma-focused cognitive behavioral therapy; possibilities

Everything was going according to plan, at the border crossing from Rwanda to the Democratic Republic of Congo (DR Congo), until a customs official called Mama Fatuma spotted a bulging money waist bag beneath my shirt. “What’s that?” she asked. My heart sank. “It’s a money belt,” I stammered, my Swahili deserting me for the first time since entering the room. Ominously she closed the door.

“How much money have you got in it?” She looked at me quizzically. “Write it down for me on this paper,” she demanded. My mind raced. I had more than $1,300 around my waist. (Carrying large sums of money is not uncommon in war-affected regions with no ATMs, no access to online banking, and where shops and hotels do not accept credit cards). I panicked. I scribbled down the equivalent in British pounds and prayed she would not know the exchange rate between the pound and dollar. “Don’t you know that you can’t bring in large amounts of money into the country?” she continued. “Take all your money out and put it on the table.” The friendly tone had long since left the room. I stalled. “Don’t be afraid,” she soothed. “You can trust
me.” I inwardly choked and stalled again. “Take out your money and leave it on the table.” I recognized that tone. She was not for backing down.

Slowly, I lifted up my shirt and fumbled at my money bag. I opened my wallet and looked inside. I could not believe my eyes. There was only €70 in the pocket I had opened. Prior to leaving, I must have separated my money into two pockets in my money bag and put all my dollars in another pocket. I gingerly placed my euro on the table. “Is that all you’ve got?” she asked. “Yes,” I answered (after all, it was all the euro I had on me). “Make sure you change your money in a bank,” she cautioned before telling me to return my money again. “No problem at all,” I responded, my voice returning to its usual tone and pitch again. “And don’t forget to come in and say hello to us when you pass by again,” she reminded me before handing over my passport with the all-important stamp. I left the building weak-kneed and relieved to still have all my U.S. dollars and said a quiet prayer of thanks for the goodness of friends whose last-minute donation had saved us from having to leave a small fortune in U.S. dollars at the border crossing that day.

**NATURE OF THE MENTAL HEALTH PROBLEM**

**The Impact of Armed Conflict on Mental Health**

Armed conflicts cause significant psychological and social suffering to affected populations. Psychological suffering includes posttraumatic stress disorder (PTSD), depression, anxiety, substance abuse, suicidal ideation, social withdrawal, low self-esteem, loss of trust, and feelings of guilt and shame (Schaal, Elbert, & Neuner, 2009). Of these disorders, PTSD is the most prevalent (Neuner, Catani, et al., 2008) and the most researched (Jordans, Tol, Komproe, & de Jong, 2009).

**The Role of Particular War Experiences in Creating Psychological Distress**

Although exposure to any war event can cause psychological distress, exposure to particular types of war events seem more likely to increase mental distress. For example, rape is one of the most adverse single war events because it leads to PTSD in about half of its victims (Schauer, Neuner, & Elbert, 2005). Child soldiering is another war experience that is particularly harmful with posttraumatic stress symptom (PTSS) rates of 97% (Derluyn, Broekaert, Schuyten, & De Temmerman, 2004), 98% (Amone-P’Olak, Garnefski, & Kraaij, 2007), and 99% (Amone-P’Olak, 2005) found among ex-child soldiers in Uganda. These exceptionally high figures, however, must be treated with a certain amount of caution because they are based on self-administered PTSS screening questionnaires and not on a diagnostic interview conducted by a clinician skilled in diagnosing PTSD. Also, none of the studies measured PTSS rates in a comparable control sample of nonchild soldiers.

One study that did use a control group to look at specific war events and psychological distress found that children who had been abducted by armed militias in Uganda showed higher rates of PTSD (26.8% vs. 12.7%), major depression (19.5% vs. 4.2%), and generalized anxiety disorder (13.4% vs. 4.2%) than their nonabducted peers (Okello, Onen, & Musisi, 2007). This finding was supported by Kohrt et al. (2008) who found that Nepalese child soldiers had greater levels of depression and PTSD than their nonconscripted peers even after adjustment for traumatic exposures and other covariates.

In addition to severe traumatic events, such as rape, abduction, or soldiering, prior traumatic exposure can also increase the probability of developing psychological distress (Brewin, Andrews, & Valentine, 2000). For example, PTSD appears to have a “building block” or “dose-response” relationship in which the more traumatic events a person is exposed to (dose), the greater their chances of developing PTSD (response). Research looking at a PTSD threshold...
found that every person who reported more than 25 traumatic life events met the criteria for a PTSD diagnosis (Schauer, Neuner, Karunakara, Klaschik, & Elbert, 2002).

**Age and Vulnerability to Psychological Distress**

Several studies have found that children between the ages of 5 and 9 years have greater vulnerability to developing PTSD (Barenbaum, Ruchkin, & Schwab-Stone, 2004). Prior to this age, past events cannot be recalled in narrative form because of developmental limitations (Schauer et al., 2005), and very young children remember traumatic experiences only in an implicit way. This claim is supported by previous research by Macksoud (1992) who surveyed the parents of 2,220 Lebanese children to examine how war affects children from 3 to 16 years of age. The study found that preschool children were less aware of and less likely to be exposed to war events than their older siblings and thus were at lesser risk of developing psychological distress. But from the age of 5 years, children’s awareness and ability to process real events is expanding. Although their awareness of danger increases, their lack of cognitive maturity inhibits their chances of developing defense mechanisms to protect themselves (e.g., rationalization). In addition, their limited understanding of the sporadic nature of war, the cessation of hostilities, or the fluctuating security in a region can result in prolonged and heighten ed states of fear or anxiety in younger children, which does not appear in children of an older age.

**Gender, Sexual Violence, and Differences in Psychological Distress**

Girls are more likely to suffer from psychological distress than boys. In general, rates of PTSD are higher among girls than boys (Amone-P’Olak, 2005; Hawkins & Radcliffe, 2006), and girls are more likely to suffer from depression and anxiety than their male counterparts (Derluyn, Broekaert, & Schuyten, 2008; Mels, Derluyn, Broekaert, & Rosseel, 2010).

Research on gender differences among war-affected adolescents from developing countries found that girls are more vulnerable to internalizing problems (e.g., depression, anxiety, suicidal thoughts), whereas boys are more vulnerable to externalizing problems (e.g., drinking, drug-taking, violence; Derluyn et al., 2008). Mels et al. (2010) observed that boys tend to develop externalizing behavior problems as a result of severe traumatic exposure, whereas girls tend to develop internalizing problems when faced with cumulative daily stressors. These findings reflect culture-bound gender expectations. For example, in most African cultures, drinking and smoking are taboo activities for girls, so their psychological distress is more likely to be manifested as depression or anxiety. In postconflict situations, limited access to food, clothing, and healthcare facilities are examples of daily stressors that impact more on females than males because girls and women are responsible for feeding, clothing, and tending to the sick in traditional cultures.

Another reason for girls’ higher rates of distress concerns an alarming increase in the use of systematic rape in war zones (Amone-P’Olak, 2005). For example, a study in war-affected eastern DR Congo estimated the annual rape rate to be 67 per 1,000 (Peterman, Palermo, & Bredenkamp, 2011). This is 134 times the U.S. rate (National Crime Victimization Survey, 2008) and shows the added dangers to which war-affected girls are exposed. Sexual violence and rape can lead to long-term detrimental psychological, physical, and vocational outcomes (Tercier Holst-Roness, 2006). To date, however, there has been no systemic review on the impact of sexual violence or exploitation on war-affected girls and, at the time of writing, the author is aware of only one published intervention study in this field (O’Callaghan, McMullen, Shannon, Rafferty, & Black, 2013).

**PROBLEMS WITH MENTAL HEALTH DELIVERY IN THE REGION**

The next section will focus on the theoretical and methodological difficulties in delivering mental health services for war-affected children. These challenges include a lack of reliable measures of
psychological distress; a dearth of evidence-based research on interventions for war-affected children; working in a culture with diverse mental health services, treatments, and cultural practices; working with traumatized individuals; and carrying out multiagency work with humanitarian organizations with competing agendas to your own.

**Problem 1: Lack of Reliable and Valid Measures of Psychological Distress**

One of the greatest obstacles to both delivering a mental health intervention and measuring the effectiveness of this intervention is the lack of reliable and valid measures of psychological distress in non-Western cultures. Indeed, most studies that purport to measure psychological distress (e.g., PTSD, depression, anxiety, stigma, behavioral problems) used translated written measures designed and developed with Western samples. These Western populations often understand the symptoms and causes of mental health problems very differently to those of non-Western samples.

This has led to questions about the cultural appropriateness of psychological distress measures in cultures which are more likely to consider psychological distress as manifestations of possession by evil spirits than as symptoms of trauma. In fact, even applying diagnoses such as PTSD to non-Western samples is controversial within psychiatry. Research on psychological distress in northern Uganda (Bolton et al., 2007) found that symptom clusters for depression-like and anxiety-like conditions differed from *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*) symptomology and contained additional symptoms not recorded in the West (e.g., holding your cheek). Summerfield (2002) argues that Western mental health workers and the public have a misguided image of war and its aftermath which is often far removed from the actual experience of non-Western societies. He criticizes what he sees as an attempt to “medicalize” life and argues that the transfer of Western concepts and techniques to war-affected societies in developing countries is inappropriate because every culture has its own frameworks for mental health, and norms for help-seeking at times of crisis.

**Problem 2: Limited Research on Effective Interventions for War-Affected Youth**

Another theoretical problem in delivering mental health interventions to war-affected populations is the dearth of research in this new area. Although there is no shortage of studies documenting psychological distress in war-affected children, research on the most effective interventions to deal with this distress is scant. A report on psychosocial adjustment and social integration of children affected by armed conflict (Betancourt et al., 2008) found research gaps in nearly every field possible: the evaluation of interventions for children in conflict, the role of traditional healing ceremonies, cross-cultural measures of mental health constructs, longitudinal studies, prevention, protection and care of children, training of local staff in locally viable and health sustainable mental programmes, the integration of other service systems, qualitative and quantitative methods of research in the field, the impact of sexual violence on girls, and the like (Betancourt et al., 2008).

Although the Betancourt et al. (2008) study focused on child soldiers, their findings mirror the conclusions of a systematic literature review of psychosocial and mental healthcare interventions for children affected by war and conflict (Jordans et al., 2009). The authors identified a “serious lack of rigorous studies evaluating psychosocial care for children affected by war” (p. 2). Out of the 500 studies examined, only 66 met inclusion criteria for rigorously controlled research. The authors noted that where controlled studies did occur, the effect sizes tended to be moderate, and several studies had major methodological flaws.

One reason for this lack of research is that interventions for war-affected children are frequently project-related rather than carefully composed, epidemiological, clinical research studies
(Martz, 2010). Nongovernmental organizations (NGOs) that report on mental health or psychosocial programmes tend to focus on where donor money is spent rather than on evaluating how (clinically) effective a programme is on which that the money was spent. The net result is that few interventions with children in conflict zones are rigorously evaluated (Bolton et al., 2007). This lack of evaluation prevents researchers working with highly affected populations from being able to adapt or improve existing evidence-based interventions and instead requires them to extensively focus on intervention process and methodological rigor, which may restrict intervention creativity, adaptability, and the development of broader outcomes measures (e.g., family cohesiveness, community functioning).

**Problem 3: Diverse Mental Health Services, Treatments, and Cultural Practices.**

Wars and conflicts damage infrastructure such as hospitals, schools, and universities and often result in a “brain drain” of qualified mental health practitioners with the means to escape war-affected countries. This is because ongoing threats of violence, political instability, and civil unrest threaten the lives of researchers and practitioners, and a lack of funding makes it exceptionally hard to carry out research in this field (Martz, 2010). Compounding this problem is the fact that countries in conflict are often developing countries (e.g., DR Congo) with already stretched and underresourced mental healthcare facilities. Thus, mental health facilities that were struggling simply to treat non–conflict-related mental health problems soon become overwhelmed by the increase in war-related mental health difficulties. It is a double tragedy that it is often the countries with the greatest need of psychological interventions which are also the countries with the fewest trained mental health professionals to assist (Neuner, Catani, et al., 2008). It is estimated that the DR Congo has 11 doctors per 100,000 people (Medecins Sans Frontiers [MSF], 2006) and an even smaller number of psychiatrists. This lack of experienced practitioners results in only the most severely affected (who present with extreme or violent behavior) being treated, whereas the significant suffering majority receives little or no help or support.

In the absence of trained mental health practitioners, this “treatment gap” is filled by a panoply of self-styled healers offering a bewildering array of treatments from counseling to all-night exorcisms and from beating and chaining psychotic individuals to prescribing a concoction of herbs, roots, and magical incantations. Although these treatments are not empirically based or rigorously evaluated, they nevertheless result in powerful belief in their effectiveness and necessity in treatment. One such example is the strong belief in the spiritual origins of many psychological symptoms. For example, during a seminar planning session for a mental health and psychosocial intervention with war-affected child soldiers and street boys in eastern DR Congo (McMullen, O’Callaghan, Shannon, Black, & Eakin, 2013), a facilitator proposed an all-night exorcism to rid participants of evil spirits which has entered them during their time with the rebels.

In addition to differing beliefs and treatments to mental health conditions, researchers conducting interventions in non-Western settings often find unexpected and unanticipated cultural customs. One such custom is the clear delineation of gender roles that often exists in traditional communities. For example, etching water is a female chore and during the dry season, girls in the intervention group would arrive late, having spent the early morning travelling to fetch water from boreholes that had not yet dried up.

**Problem 4: The Mental Health Needs of War-Affected Populations**

But even when mental health workers can be found to facilitate interventions, the past traumas of both facilitators and participants can sometimes unwittingly intrude into the intervention, and seemingly innocuous stimuli can be the trigger for flashbacks or painful memories from the past.
I will always remember one translator who confided after one of the sessions on trauma flashbacks that he can no longer slaughter a chicken any more for the sight of the blood spurting from the chicken’s neck reminds him of seeing a rebel captive being given a “vest” (a code word for chopping off both arms with a machete). One girl in the course of the intervention mentioned that she no longer eats meat after seeing human flesh being cooked and roasted by members of a militia group called “Mayi-Mayi.” The Mayi-Mayi gets their name from a practice of smearing their bodies with water and then telling their fighters that the water will protect them from gunshot wounds. So powerful is the belief that our educated translator, who runs his own English school, swears blindly that he has seen bullets fall to the ground like drops of water when fired at Mayi-Mayi fighters who survived the shooting completely unscathed. In another session, a participant described how Mayi-Mayi fighters would kill a person, eat their heart, and drink their blood. Some participants witnessed (and even participated in) mass gang rapes carried out by the Mayi-Mayi in the perverted belief that multiple sexual experiences prior to war enhances one’s conquests on the battlefield. Seeing these events leave an indelible mark on witnesses who can struggle to maintain attention or facilitate a workshop when an innocent word or imaged caused them to revert back to a time of fear and horror.

Problem 5: The Challenges of Multiagency Work

Frequently, in working with war-affected populations, the greatest challenge often lies not in working with the population you are seeking to help but in working with the multitude of competing agencies seeking to help that population as well. Although multiagency work provides many benefits (e.g., combined expertise, enhanced cultural sensitivity, sustainable development), challenges are never far away. For example, one of the stakeholders in our research project in the DR Congo was The Child Protection Representative of the United Nations (UN) Peacekeeping Force (MONUSCO). On International Day of the African Child, we had to cancel our intervention session for that day to allow participants to attend a party hosted in their honor by the Child Protection Representative. In an effort to reduce the practice of child prostitution, journalists were invited to interview participants about brothel life, and they broadcast these anonymized interviews the following day. What was overlooked was that participants’ voices could be identified by neighbors and friends, so this well-meaning action inadvertently resulted in stigmatization for the children. The next day, some refused to engage in the seminar, blaming us, who were completely unaware of the planned radio interviews, for the debacle, and I spent an afternoon visiting radio stations trying to ensure the tapes would not be broadcasted again.

Although the party was funded by the UN, transport was not and a pickup truck had to ferry a huge number of participants to and from the field. To save fuel and time, a local driver packed as many participants as possible into the back of his open-top truck and drove at reckless speed to and from the party. In his haste, he crashed and injured a motorcyclist. Angered by the driver’s carelessness, local people wanted to torch the pickup truck and it had to be taken off the road for a few days. Because of this, we had no car for several days, which added to our project costs because we needed to source an additional new vehicle. It was ironic that an event organized by the UN’s Child Protection Representative in the town increased the emotional distress of some participants, led to disengagement in an intervention by others, increased project costs, and placed the safety of children in jeopardy. It was a salutary lesson for us all that sometimes, the very people responsible for protecting children’s rights can unwittingly place the charges at even greater risk, a risk that could have been offset if all of the agencies involved had met in advance to plan, coordinate, and run this event together.
Efforts to Address These Issues

Special Concerns Related to Delivery and Modification

War-affected settings require special delivery and particular modifications to research and intervention. This can involve the use of non-Western measures of psychological distress, preresearch planning, on-site team supervision, team meetings to check on the mental health of the team, and multiagency planning meetings which incorporated the voice of the child.

Adaptation 1: Use of Non-Western-Developed Measures of Psychological Distress

Although the field of humanitarian psychology is new and research in this field is less than 20 years old, fortunately, progress has been made in designed measures based on indigenous idioms of psychological distress. For example, the African Youth Psychosocial Assessment Instrument (Betancourt et al., 2009) is a 40-item measure developed in northern Uganda after extensive qualitative consultation with the youth, caregivers, and mental health workers. It is the only African-developed, validated questionnaire of internalizing and externalizing behavior and contains symptoms of distress, which do not appear in “Western-developed” measures (e.g., muttering to oneself, not following the rules of the community, sitting with your head in your hand, feeling pain in your heart, believing people are chasing you).

Including psychosomatic descriptions of traumatic stress reaction symptoms (e.g., feeling pain in the heart, suffering from headaches or dizziness) is particularly important in developing valid and sensitive measures of traumatic distress among war-affected youth. Recent qualitative research with child soldiers in Uganda (O’Callaghan, Storey, & Rafferty, 2012) found that young people referred to symptoms of distress in predominantly somatic terms but rarely talked of affective or cognitive symptoms, which are the mainstay of most PTSD measures (e.g., avoiding thoughts about an event, removing images from one’s memory, feeling angry). Being able to use measures that were designed and developed with comparable populations is an important first step in measuring the effectiveness of any future intervention for war-affected populations in non-Western contexts.

Adaptation 2: Preresearch Planning and Risk-Assessment for Work in a Conflict Zone

Conducting research in a politically unstable country greatly increases the preparation time and cost of any project. For example, insurance cover is difficult (and more expensive) to obtain, and research proposals need a detailed evacuation plan, in case of an upsurge in violence in the region. Fuel shortages increase transport costs, whereas access to a research site can be restricted because of insecurity. In many parts of eastern DR Congo, road travel is not advised, so domestic flights have to be taken. This adds to expenses and safety concerns because Congolese airlines have one of the poorest air safety records in the world (BBC, 2008).

Unfamiliar conflict settings also make accurate risk assessment difficult, increase anxiety, and add to the level of threat perceived by researchers on the ground. I remember one nervous moment during a project in DR Congo when we thought our hotel was being attacked after pickup trucks crammed with heavily armed soldiers raced to the front door of the hotel. However, we later learned in speaking with some of the soldiers that they were there to guard a police commissioner who had arrived from the capital to inspect the local police force. Investing time and effort in learning the local language and researching the political situation before travelling is a
key first step in being able to respond to perceived threats with informed knowledge of the past and accurate, current information in the present. On-the-ground knowledge from local translators and fixers also greatly contributes to accurate risk assessment and keeping the team safe in the field.

**Adaptation 3: Cultural Respect Tinged With Cultural Scepticism**

A lack of mental health professionals often results in various available and accepted treatments for mental health problems carried out by various different people, each with their own unique take on the origin of a person’s problems. As a nonlocal researcher, a great challenge can exist in finding common ground between a Western medical framework of mental illness and some of the beliefs and practices of a traditional, non-Western society. This is particularly relevant in resource-poor settings where beliefs are steeped in ancient, cross-generational practices and have been syncretized to form norms and practices, which may be very alien to many with a Western understanding of mental health.

To overcome the divide between a Western and a non-Western culture’s diverse services, treatments and cultural practices, knowledge, and a genuine interest in understanding the culture are vital prior to any intervention occurring. This includes reading about the culture, learning about culture norms and practices of the people, and, where possible, learning the local language prior to arriving. During the intervention, a “community advisory board” (Betancourt, 2011) can be formed to provide ethical and cultural advice and ensure local perspectives are integrated. Also, selecting and training local facilitators will also help to ensure that the sessions being delivered are as culturally relevant as possible.

For example, in the intervention for war-affected girls, local facilitators explained the necessity of carrying out family chores (e.g., fetching water) and fulfilling social obligations (e.g., attending wakes) to the researchers, so the starting time of sessions was modified to facilitate this. Based on input from local facilitators, we modified the intervention so that a female facilitator will talk to the girls about ways to reduce the risk of sexual abuse/attack, included a short prayer at the start of the graduation session, invited local pastors to address the girls, and included local songs and games as warm-up activities for each module.

However, it is important that an openness and respect of differing cultural beliefs and understandings (e.g., “magic” water that stops bullets piercing flesh, poisoning someone by shaking their hand, or devils inhabiting child prostitutes) do not lead to a lack of criticality or a denial of one’s own belief structure. Nowhere is this more apparent than in the challenge of understanding practices which appeared to run completely contrary to Western therapeutic norms. For example, one morning upon arriving at the intervention site, I found our male translator asking some of the female participants about prior sexual experiences they had experienced. Although we deemed this question inappropriate and irrelevant and asked him not to ask the question again, this reflected our cultural bias and what we felt was appropriate or inappropriate in our own Western culture.

This case is relevant for all cross-cultural researchers for it goes to the heart of fundamental assumptions on which Western therapeutic practice is based (e.g., right to privacy, confidentiality). In the end, the issue was resolved during a daily team meeting and the input of the Congolese female facilitators. It was an important lesson because we learned that although cultural practices can vary, one cannot assume that just because someone in a particular culture is behaving in a particular way, then this behavior is an accepted cultural norm or considered to be helpful (Wessells, 2006). In this context, the two female facilitators explained to the male translator why this question was inappropriate and should not be asked in future. Working with mature and experienced male and female colleagues, familiar with
the culture, is one way of sifting the good and helpful cultural practices from the bad and unhelpful ones.

**Adaptation 4: Self-Care and Duty of Care**

Recounting or hearing tales of violent gang rape, mass murder, or cannibalism takes a significant emotional toll on both participants and facilitators. To reduce the negative impact on participants, it can be helpful to offer psychoeducation, teach relaxation techniques prior to any narrative sessions, provide graded exposure to traumatic narratives, and offer individual narrative sessions to participants. In trauma-focused cognitive behavioral therapy (TF-CBT; Cohen, Mannarino, & Deblinger, 2006), the intervention provides psychoeducation on what trauma is and how it might be manifest before teaching and practicing progressive muscle relaxation, deep breathing, and constructing a “safe space” using mental imagery. Once these skills have been mastered, participants then use them in subsequent trauma narrative sessions. Trauma narrative sessions need to involve graded exposure. In the O’Callaghan et al. (2013) study, this graded exposure involved drawing a traumatic event and then providing an opportunity for each participant to share and explain their drawing individually with a facilitator. Regular “mental health” check-ins with participants are advisable before each session, and social workers attached to the project can follow up on all participant absenteeism to ensure that these absences are not caused by increased psychological distress or deteriorating mental health.

But in addition to the mental health needs of participants, the physical needs of vulnerable participants in an intervention are also of concern. During the intervention with war-affected girls at risk of sexual exploitation, some participants were returning at night to sleep in brothels they had been abused in before. Host families or family members had to be found for each girl currently living in a brothel, which was an unexpected and challenging part of the intervention because few families wanted to have a former prostitute living under their roof. But what was even more surprising for the team was the fact that some girls did not want to leave the brothels where they were earning good money and eating well. Sometimes, family members did not want to accept the children back home either. The saving grace in this project was the partnering NGO, World Vision, which was invaluable in monitoring the living conditions of participants and providing funding for temporary housing while families were being traced. Any academic institution working in this field would be well advised to link with a reputable NGO with a long-term, on-the-ground presence that can support the participants’ physical, emotional, and psychological needs long after the research team has returned home.

In addition to concerns about the mental health of participants, there is also a duty of care to researchers and facilitators in the field who hear shocking and distressing acts of unimaginable cruelty and depravity. To help the researchers on the ground cope with this therapeutic burden, regular supervision is required by experienced mental health practitioners by Skype and e-mail. It is also beneficial if there are two or more researchers in the team who can help each other and provide a forum for discussion and emotional support. The mental health of local facilitators (who may find participants’ stories even more distressed because they can trigger painful memories among those who may have witnessed similar acts) must be addressed. Daily group meetings are a useful way of checking in with the team to see how they are coping and providing some individual support if that is deemed necessary. Also, inviting the facilitation team out for a weekly meal to boost morale and allow everyone to unwind and relax together can help, too.

**Adaptation 5: Involving Stakeholders in Decision-Making Roles**

One way of reducing the negative impact of multiagency work is to involve all stakeholders in planning and decision making and to include children’s perspectives in any discussion regarding
their support. Another way is for the field to become more reflective, open, and willing to share and learn from past mistakes and critically analyze their projects so that others do not make the same mistakes. More opportunities to do this, I believe, could greatly improve the effectiveness of future interventions and ensure that above all, the foundational maxim of all interventions, *Primum non nocere*, is always observed.

**Barriers to Service Delivery**

This next section will outline some of the logistical, security, and educational barriers to delivering effective interventions for war-affected and sexually exploited populations.

**Logistical Challenges**

As the opening anecdote shows, research in war-torn countries carries many challenges. As more and more of the government’s budget is channelled to military spending, less money is available for infrastructural projects such as roads, water and sanitation systems, and electricity supply. A lack of power results in electricity shortages, limited opening hours for banks, and no ATM or credit card machines. Without these machines, ATM and credit cards cannot be used, so money needs to be wired into the country via private money transfer companies or carried across the border from countries with more advanced banking systems.

Services we take for granted in the developed world often seem to conspire to hamper an intervention. One day, I left the intervention site to get 50 questionnaires printed, but a poorly maintained bridge had collapsed the previous day so I had to take a long detour on the back of a motorbike to avoid the broken bridge. When I reached the photocopying store, I discovered that their printer was out of ink. So, I left on foot to another store but this place does not have any power (but plenty of ink!). The third shop had ink (whew!) and power (great!), but the machine has not been serviced and you could not read the photocopy. Eventually, after the fourth attempt, I found a place with power, ink, paper, and a functioning photocopier and got the photocopies needed. But something that should be relatively straightforward required planning and absorbed time, thereby reducing the time available to train facilitators or work therapeutically with participants.

**Security Challenges**

Military weaponry is a frequent sight in war-affected countries, and it can be initially disturbing to see armored personnel carriers, tanks, and military patrols with machine guns mounted on the back of pickup trucks being driven at high speed through the streets. Hotels and guest houses often have armed, uniformed policemen on guard at the gate, whereas private mansions shelter behind 10-foot high blast-proof walls. Most NGOs employ armed private security firms. UN army patrols are armed, police patrols are armed, army patrols are armed, and private security patrols are armed. The ready availability of weapons coupled with the poor or sometimes nonexistent wages of the military and police creates a fertile climate for armed robbery and protection rackets. Researchers working in conflict zones need to get regular updated security briefings from the UN outlining the present dangers and risks in that area and the crime risk at night. In most cases, it is inadvisable to leave your hotel after sundown, so all meetings with stakeholders must take place during the day. Because the sun sets before 7 p.m. in countries close to the equator, this reduces the working day because people like to be on their way home or in their compounds before darkness falls.
Educational Difficulties

War-affected children have often missed out on considerable amounts of schooling because school buildings are closed or damaged during conflict, and teachers can be conscripted into armed groups. Thus, war-affected children often have lower literacy rates, and this can make it harder to obtain written informed consent and also reduces the effectiveness of trauma narrative sessions. Obtained informed consent must be done very sensitively because participants who cannot read or write often feel embarrassed and self-conscious about this fact and may opt not to engage in the intervention unless consent is sought verbally or privately. If consent is sought verbally, participants may agree to participate in order not to go against the perceived wishes of the group or in the belief that the acquiescing of those who have had more education than they have means that the intervention is a positive thing. Literacy difficulties can also reduce the effectiveness of trauma narration for children because illiterate children cannot write about their traumatic experiences. But neither can they draw pictures of their traumatic experiences because those who cannot write usually have not had the opportunity to learn how to draw or hold a pencil either. Thus, when working with traumatized populations with low literacy levels, individual verbalized trauma sessions need to occur. This is labor-intensive and takes much longer than group-based writing or drawing narrative sessions and can sometimes reduce the effectiveness of an intervention or limit the individual time a participant has to process their trauma.

Successes

Yet, despite the difficulties with mental health delivery in war-torn countries, the modifications required to deal with these difficulties, and the logistical, security, and educational barriers to service delivery, it is still possible to carry out sustainable and effective interventions, with methodological rigor and involving multiagency work.

Sustainable and Effective Interventions

In extensive trawl of psychology databases, the author failed to find any published study that used TF-CBT in a group setting with sexually abused or sexually exploited girls, any study that designed a psychological intervention specifically for survivors of gender-based violence in a conflict zone, or any study that used a specific therapy manual with Swahili-speaking Congolese adolescents. Thus, the O’Callaghan et al. (2013) study is a timely and critical addition to the field because it draws attention to a population with significant psychological distress that had been overlooked in previous studies that used psychosocial and mental health interventions in humanitarian situations. This study has also contributed to ongoing research (e.g., the intervention manual was used during three subsequent interventions in the DR Congo and one intervention with refugees in Uganda) and informed regional health policies in DR Congo. For example, the intervention manual and translated assessment tools were requested by the DR Congo’s leading gynecological hospital to assist in a current community health screening and treatment programme for women and girls exposed to sexual violence in the province of South Kivu.

Methodologically Rigorous Research

Research is sometimes classified along a continuum of methodological rigor ranging from Type 1 (most methodologically rigorous) to Type 6 (least methodologically rigorous). To be classed as Type 1, a study must have comparison groups with random assignment, blinded assessments, clear presentation of inclusion and exclusion criteria, state-of-the-art diagnostic methods, adequate sample size to offer statistical power, clearly described statistical methods, and follow-up
studies (Silverman et al., 2008). The O’Callaghan et al. (2013) study meets the previously mentioned criteria for a Type 1 study and so ranks in the top band of methodologically rigorous studies. Therefore, the findings of this study provide the most rigorous methodology available to test the intervention’s effectiveness and demonstrate that despite the challenges regarding high quality, methodological research is still possible in low- and middle-income, war-affected settings.

Multiagency Nature of Research

Finally, despite the difficulties of multiagency work outlined before, this research project sought to draw on the expertise of more than 15 different stakeholders to maximize the intervention’s effectiveness. Input was supplied by Harvard University (instruments and measures used), the University of South Carolina (scripts for the intervention), Columbia University (review of proposal), Queens University Belfast (supervision), Allegeny General Hospital (e-mail supervision from one of the cofounders of TF-CBT), Futures NI (therapeutic support from a consultant psychotherapist), World Vision Beni (the partner NGO), Centre d’Encadrement d’Enfants Rescapés Non Accompagnés et Orphelins (a community-based NGO that interviewed participants), Action Concrète pour la Protection de l’Enfance (an NGO that supervised the fostering of some of the girls), United Nations Children’s Fund (which reviewed the research proposal), MONUSCO (The United Nations Organization and Stabilization Mission in the Democratic Republic of Congo), local pastors, the village mayor, representatives of local government, parents, local radio stations (which sent reporters to carry out interviews on the intervention), and the girls directly involved in the study. As the previous sections have outlined, the pioneering aspect of this research added greatly to its complexity, and thus, the team effort of so many different groups working together helped ensure that the intervention reduced psychological distress among war-affected survivors of gender-based violence and provides a blueprint for future collaboration in the field.

Summary of Research

To our knowledge, the O’Callaghan et al. (2013) study involving 52 12- to 17-year-old war-affected girls was the first randomized controlled trial of a trauma-intervention for war-affected girls in low- and middle-income countries who had been exposed to rape and sexual abuse. Results show that group-based, culturally modified TF-CBT significantly reduces psychological distress and psychosocial difficulties among this population. These gains were either maintained or improved (for depression and anxiety and prosocial behavior) at 3 months postintervention. Similar to previous randomized controlled trial interventions in war-affected settings with a lack of mental health professionals (Bolton et al., 2007; Ertl, Pfeiffer, & Schauer, 2011; Schaal et al., 2009), this study shows that TF-CBT can be applied successfully by trained local facilitators without a mental health or medical background.

The effect of TF-CBT cannot be attributed to spontaneous recovery or vocational training because the control group also received vocational training but showed no such symptom reduction. The within-treatment effect size for PTSSs ($d = 2.04$) and depression and anxiety ($d = 2.45$) were similar or slightly higher than effect sizes in similar trials with war-affected children and adolescents.

Participants showed greater reductions in internalizing problems (e.g., depression and anxiety: $d = 2.45$) than externalizing problems (e.g., conduct: $d = 0.95$) after 3 months, although the significance value for both was the same ($p < .001$). This may be that because the intervention, with its emphasis on correcting inaccurate and unhelpful cognitions and talking about traumatic events, was more effective in targeting internalizing problems or because internalizing problems were higher than conduct difficulties at pretest and more likely to be reduced during an intervention. By reducing daily stressors and increasing psychological care, depression and anxiety was targeted from two different directions and resulted in improvements in all measures of internalizing behavior.
Longstanding Struggles but Lasting Successes

Future Directions and Steps

Future studies in this field will include more research on identifying and meeting participants’ psychosocial needs, dismantling studies to determine which CBT modules lead to the greatest reduction in psychological distress, and hybrid interventions which embed mental health support within existing psychosocial models and future partnership models of service delivery between academic institutions and NGOs on the ground.

Research on Psychosocial Needs

Although this article focused predominantly on the psychological impact of conflict on young people, the author acknowledges that psychological effects are but one of a myriad of challenges children in conflict zones face (e.g., physical injuries, lack of food or water, homelessness, family separation, lack of schooling). Partly because of the availability of psychometrics, a large number of studies have studied the psychological effects of war and conflict, but this does not imply that psychological effects are the most detrimental war legacy. In fact, when war-affected girls exposed to sexual exploitation were asked about their worst life experience, loss of a parent was rated higher than rape, sexual exploitation, or unplanned pregnancy (O’Callaghan et al., 2013). Thus, future research must examine in greater detail the psychosocial impact of war and conflict and design and invest in long-term and sustainable interventions to meet these needs.

Dismantling Studies

So far, research has been unable to ascertain which component of the TF-CBT intervention (e.g., parenting sessions, relaxation techniques, cognitive reprocessing, construction of a trauma narrative) accounted for the greatest reduction in psychological distress. Although it is difficult to separate complementary components which are not intended to stand alone, nevertheless, a dismantling study comparing components would be of particular research interest. For example, comparing exposure modules and nonexposure modules with traumatized children would be useful to ascertain if the exposure component of the intervention was crucial in accounting for most variance in the reduction of psychological distress symptoms. Such a study could examine the precise role which “trauma exposure” plays in recovery from symptoms of traumatic stress and help determine whether trauma-focused or non–trauma-focused interventions should be the treatment of choice for psychological distress among war-affected children.

Hybrid Interventions

The field of interventions with children exposed to political violence has experienced a shift from single intervention approaches (e.g., posttraumatic stress, depression, anxiety) to multisectedored, multilayered, multilevel, ecological, systems-oriented approaches (Jordans et al., 2010). These approaches seek to meet basic physical needs (e.g., food, water, clothes, hygiene products, shelter), emotional needs (e.g., social interaction, belonging, acceptance), psychological needs (e.g., reduction in psychological distress), and vocational needs (e.g., providing vocational tools and equipment) as part of the whole intervention package, and as such are more likely to be effective and beneficial in the long term.

Partnerships

Finally, by partnering with reputable NGOs with a long-term presence on the ground, academic institutions are more likely to deliver culturally appropriate interventions tailored to the specific needs of participants, and NGOs can benefit from having a rigorously evaluated and empirically based intervention with proven efficacy. Notwithstanding the challenge of working
with a large number of stakeholders, multiagency projects increase an intervention’s systemic focus and ensured that an effective intervention is delivered to a waiting list control group after the researchers have left. Perhaps, this is the greatest contribution possible for an academic institution in providing supervised “on-the-job” training and translated manuals; local service providers can use evidence-based interventions to build their own capacity and ensure that help and support are provided to those who are most in need. This symbiotic relationship also benefited the university in providing access to technical and logistical support on the ground and ensuring a study is culturally appropriate at all stages from planning to delivery to evaluation of the intervention.

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Challenges for Evidence-Based Care for Children With Developmental Delays in Nicaragua

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Evidence of successful models for promoting early childhood development and for effectively addressing developmental delays is available, yet the adoption of evidence-based strategies is limited in low-income countries. Nicaragua, a low-income country on the Central American isthmus, faces policy-, organizational-, and community-level obstacles which prevent families from receiving the benefits of early child development programs as well as other necessary services for children at risk of or with developmental delays. Failing to address developmental delays in a timely manner leads to detrimental social and economic consequences for families and society at large. In this article, we examine existing information on early childhood development in Nicaragua and discuss some programmatic implications for the recognition and early intervention of developmental delays in Nicaragua.

Keywords: Nicaragua; developmental delays; barriers to care; evidence-based care

Improved access to skilled birth attendance and management of childhood infectious diseases in low-income countries have led to important reductions in the mortality rates of infants and children younger than 5 years of age (Lozano et al., 2011). This situation has increased the number of survivors as well as the number of children who need specialized healthcare services but without parallel developments in infrastructure and healthcare workforce capacity. For children with development delays and those with special healthcare needs, important lapses in the provision of services remain in the developing world (Scherzer, Chhagan, Kauchali, & Susser, 2012). The situation is aggravated by an increased burden of risk factors for developmental delays in low-income countries such as maternal complications (Sen, Yayla, & Levene, 2003), macro- and micronutrient deficiencies (Black et al., 2008), recurrent diarrheal and parasitic infections (Rodriguez, Cervantes, & Ortiz, 2011), poor mother–child interactions (Walker, Chang, Powell, Simonoff, & Grantham-McGregor, 2007; Walker, Wachs, et al., 2007), and toxic exposures (Ballew et al., 1999; Little et al., 2009). The confluence of adverse exposures often results in lifelong morbidity and decreased life expectancy (Walker, Wachs, et al., 2007).
National data on developmental delays are lacking for many low-income countries, which constitute a significant roadblock for the recognition of the importance of early childhood development and for addressing the impact of developmental delays. However, some statistical estimations have been made. Using a combination of nutritional (i.e., growth retardation) and educational measures (i.e., school achievement and cognition) with data from more than 150 countries, Grantham-McGregor and colleagues (2007) estimated that more than 200 million children worldwide do not fulfill their developmental potential in growth and educational outcomes. Most children were from the developing world, which plays a significant role in the perpetuation of the cycle of poverty in low-income countries (Grantham-McGregor et al., 2007). If left unchecked, a significant proportion of developmental delays will progress to lifelong disabilities with greater use of services and significant costs to families and society as a whole (Maulik & Darmstadt, 2007).

If developmental delays are recognized early and adequate interventions are provided in a timely manner, their effects can be ameliorated effectively. There is ample evidence of successful models for promoting early childhood development and addressing developmental delays (Simeonsson, 1991; Walker, Chang, Powell, & Grantham-McGregor, 2005; Walker, Chang, Vera-Hernandez, & Grantham-McGregor, 2011). However, the adoption of evidence-based strategies remains insufficiently integrated in low-income countries. To address this gap, it is necessary that practitioners, researchers, and policy makers focus on identifying the challenges which specific low-income countries face in the adoption and dissemination of evidence-based interventions (Blackman, 2002; Scherzer et al., 2012). This article focuses on Nicaragua, a low-income country in Latin America, to examine the available information on developmental risks and delays from Nicaragua available in scientific journals, official websites, and public use datasets. We conclude with recommendations for programs and future research, especially regarding identification and early intervention services in Nicaragua.

**Evidence Base of Early Childhood Development Programs**

Early childhood development (ECD) is the foundation for schooling, learning, and economic productivity of individuals (Evans, Ilfeld, & Meyers, 2000; Heckman, 2006). ECD is defined as the period of human development up to 8 years of age, when the basic physical, social/emotional, language/cognitive, and adaptive skills are acquired (United Nations, 2010). It is during this critical period that the neural circuitries for many developmental skills are formed through the interaction of genetics, nurturing environments, adequate nutrition, and responsive caregivers (Shonkoff & Phillips, 2000). The early childhood period is also particularly sensitive to the quality of experiences and to exposure which can disrupt developmental processes (Irwin, Siddiqi, & Hertzman, 2007). ECD represents a narrow window of opportunity for the effective intervention and for the overall optimization of developmental outcomes, particularly the first 5 years of life (Fox, Levitt, & Nelson, 2010). Hence, it is indispensable to recognize problems of poor development as early as possible so that adequate interventions are provided.

Effective strategies to optimize developmental outcomes, feasible to be implemented in low-income countries, have been identified. Engle and colleagues (2007) compiled a list of successful examples of programs implemented in developing countries to promote ECD and to address developmental delays. Evidence-based programs were different in scope, with some focusing on nutritional interventions such as macro- and micronutrient supplementation to mothers and infants (Li, Barnhart, Stein, & Martorell, 2003; Pollitt, Gorman, Engle, Martorell, & Rivera, 1993), center-based parent training with or without direct child intervention (Aboud, 2007; Watanabe, Flores, Fujiwara, & Tran, 2005), or home-visiting parent–child programs (Powell, Baker-Henningham,
Walker, Gernay, & Grantham-McGregor, 2004). A few were comprehensive (multicomponent; Cueto & Diaz, 1999; Hamadani, Huda, Khatun, & Grantham-McGregor, 2006; Rao, 2005). Although with variable gains in growth and developmental indicators, most programs showed sustainable positive effects. A key characteristic shown to enhance the effectiveness of ECD programs is creating enriched learning experiences for children and their families, particularly when services were provided to socially and economically disadvantaged families (Engle et al., 2007). Programs implemented for longer periods of time and with high intensity (daily or weekly), which provided enhanced family support on areas such as health, diet and nutrition, and school, were also more effective (Engle et al., 2007). Another review by Nores and Barnett (2010) also noted that programs focusing on educational and stimulation components (direct child intervention) demonstrate larger cognitive gains with lasting benefits in health and school attainment outcomes.

Some model programs have also been designed to capitalize on the local cultural values, which enhances sustainability at the community level. For example, Klein and colleagues developed a mediated learning approach known as Mediational Intervention for Sensitizing Caregivers (MISC), which has been implemented with success in low-income countries (Jaegermann & Klein, 2010; Klein, 2001; Klein & Alony, 1993; Klein & Hundeide, 1996; Klein & Rye, 2004; Lifshitz, Klein, & Cohen, 2010; Portowitz & Klein, 2007). MISC has been cross-culturally validated in numerous countries including Uganda, Sri Lanka, Indonesia, and Ethiopia as well as developed countries such as Israel, Italy, Norway, and the United States (Chiswanda, 1997; Cole, 1993; Coulter, 1996; Gindis, 2005; Kahn, Stemler, & Berchin-Weiss, 2009; Klein, 1991, 2001; Klein & Rye, 2004; Kozulin et al., 2010; McMillan & Burton, 2009; Pearson, 2004; Pramling, 1996; Schertz & Odom, 2007). MISC enables parents to improve their child’s development using their own cultural values during their everyday interactions so that caregivers learn to develop culturally relevant psychosocial intervention strategies to reduce the negative impact of environmental risk and biological risk factors (Cole, 1993; Coulter, 1996; Gindis, 2005; Klein, 1991; Kozulin et al., 2010; Schertz & Odom, 2007). This transmission of cultural values fosters the child’s desire for lifelong learning.

Detection and Timely Intervention of Developmental Delays

Another benefit of implementing evidence-based programs to promote ECD, at large scale and in a sustained manner, is the early detection of developmental delays (Blackman, 2002). Developmental delays remain as significant public health issues for low-income countries, particularly in settings where little or no support exists within existing healthcare systems (Scherzer et al., 2012). The adequate recognition of developmental delays (i.e., failure in achieving age-appropriate skills or milestones) requires the use of sensitive and specific instruments. For example, parental concerns that a toddler child “does not produce utterances” could be indicative of speech delay, language delay, hearing impairment, a related neurodevelopmental disorder (e.g., autism), or just a parental misconception of age-appropriate development. Hence, normative instruments with established clinical cut points are needed to correctly distinguish between normal development and clinical range developmental delays or other neurobehavioral disorders that require intervention. Without routine developmental screening, many caregivers will not recognize that the child presents with a developmental delay. For example, the caregivers may not be concerned that the child is not walking by certain age, does not make eye contact, does not smile socially, or is not able to perform appropriate feeding tasks, but these could be indicative of a more serious neurodevelopmental or mental health disorder. Some of the most common disorders that go unrecognized during the first years of life, with loss of precious early intervention time, include attention deficit hyperactivity disorder (ADHD), autism spectrum disorders, cerebral palsy, fetal alcohol spectrum disorders, fragile X syndrome, hearing loss, muscular dystrophy,
vision loss to mention just a few. On the other hand, chronically ill children (e.g., with sickle cell anemia, hemophilia, asthma, or just malnutrition) may also have impaired development that often go unrecognized (Pollitt, 1994).

For population surveillance, shorter versions (screening tests) rather than comprehensive assessments (longer versions) are preferred. Although a myriad of screening instruments for the detection of developmental delays has been developed, they carry some logistical difficulties, which have prevented their wider use in poor settings, such as demand specialized training for their implementation and interpretations, time-consuming, or there are associated costs (Oberklaid, 2000). A few low-cost screening and referral programs have been developed for Latin America (Figueiras, Neves, Rios, & Benguigui, 2005), but validation and regional dissemination remains limited. Further efforts are needed to scale up low-cost screening choices in developing regions of the world. In Latin America, the evidence suggests that young children from lower socioeconomic strata are more likely to suffer from serious nutritional and health impairments which lead to persistent deficits in cognitive, fine and gross motor skills, and social–emotional development (Schady, 2006). This situation highlights the need to examine specific country settings to uncover the specific determinants and contextual challenges. In the next paragraph, we will examine the situation for Nicaragua.

**CHALLENGES FOR CHILD HEALTH AND DEVELOPMENT IN NICARAGUA**

Nicaragua is one of the five neediest countries identified by the Pan American Health Organization where urgent large-scale interventions on the causes of child morbidity and mortality have been recommended (Pan American Health Organization, 2004). The estimated mortality of children younger than 5 years of age has demonstrated tremendous improvement from 63.9 in 1990 to 26.6 per 1,000 in 2010 (Rajaratnam et al., 2010). Although Nicaragua’s infant mortality rate has also decreased significantly from 50 per 1,000 live births in 1990 to approximately 22 per 1,000 live births in 2011, this rate is still high compared to other countries of Central American isthmus (United Nations Children’s Fund [UNICEF], 2013). In tandem with the regional situation, the sustained reduction is likely because of decreases in postneonatal mortality, whereas neonatal morbidity and mortality is likely to have not changed or just changed slightly in recent years (Pan American Health Organization, 2007). Historical data on neonatal mortality are not available to make comparisons. However, the latest information indicates that neonatal mortality is a very important issue, with rate of 13 per 1,000 live births, which constitutes 60% of infant mortality (UNICEF, 2013).

**Maternal Health and Perinatal Morbidity**

The estimated maternal mortality ratio (MMR), defined as the number of maternal deaths per 100,000 live births, could be used as a proxy of the quality of prenatal development and the potential influence of maternal conditions on ECD. In 2010, Nicaragua had an estimated MMR of 95 per 100,000 live births (95% CI 54–170), which is significantly higher than the average for Latin America (62 per 100,000 women). Furthermore, a study conducted by Fenn, Kirkwood, Popatia, and Bradley (2007) found that there are significant socioeconomic inequities in neonatal survival interventions in Nicaragua. Only a third of poorest women had access to skilled birth attendance compared to 98% of the richest women, which translated in a neonatal mortality differential of twice more deaths among the poorest women (Fenn et al., 2007).

Regarding other perinatal morbidity indicators, the proportion of low birth weight (less than 2,500 g) is about 8.3% (Pan American Health Organization, 2012) and the preterm birth rate (less than 37 weeks of gestation) is estimated to be about 9% (Beck et al., 2010). Both of these indicators
are comparable to the average for Central America. Because the risk for neurodevelopmental dis-
abilities is inverse to birth weight and gestational age (Aylward, 2005), we also sought data on the
survival of extremely preterm births, very low birth weights, and small-for-gestational-age births
online in English or Spanish language searches. However, such information is not available in
official reports.

Official data summaries for other morbidity indicators such as specific perinatal complica-
tions (e.g., obstructed labor, neonatal asphyxia, and intracranial hemorrhage), congenital condi-
tions (e.g., Down syndrome, fetal alcohol syndrome, fragile X syndrome, phenylketonuria,
hypothyroidism), and neonatal intensive care unit admissions are largely lacking from available
literature. Notably, we could not find surveillance reports for perinatal complications such as
TORCH infections (e.g., toxoplasmosis, rubella, cytomegalovirus, herpes virus, and others), in-
trauterine growth retardation, or other diagnoses with relevance to developmental disabilities in
Nicaragua. All of these factors are important to consider in the medical history when evaluating
the results of the developmental screenings (American Academy of Pediatrics, 2006).

Social Disadvantage and the Quality of Early Experiences

Regarding the quality of experiences during infancy, there is dearth of information regarding
early childhood education (e.g., quality of daycare settings), parenting covariates (e.g., media-
tional style and family practices), and home environments factors (e.g., risk exposures such as
lead). However, some proxy measures are informative, such as the prevalence of growth retar-
dation. Particularly, the 2011/2012 Demographic Health Survey (DHS) indicates that 17.3% of
Nicaraguan children 0–59 months of age present severe to moderate stunting (i.e., weight for age
between $-3$ and $-2$ $z$ scores below the median of the WHO child growth standards), which is an
important risk factor for impaired development (Instituto Nacional de Información de Desarrollo
& Ministerio de Salud & Ministerio de Salud, 2013). Stunting is an important marker of loss of
developmental potential and has been associated with poor health, low educational attainment,
and low economic performance in adulthood (Dewey & Begum, 2011; Grantham-McGregor,
2007; Grantham-McGregor et al., 2007; Paxson & Schady, 2005), thereby perpetuating the cycle
of poverty among socially and economically disadvantaged groups in Nicaragua. Other risk fac-
tors that afflict Nicaraguan children from socially disadvantaged strata include a high prevalence
of gastrointestinal infections, which further exacerbate nutritional deficiencies (i.e., risk factor for
stunting) and predispose to further morbidity and complications (Amador et al., 2008; Gorter
et al., 1998; Munoz-Antoli, Pavon, Marcilla, Toledo, & Esteban, 2011; Rosewell et al., 2010).

Developmental Delays in Nicaragua

Although no official data exist about developmental delays and related disabilities in Nicaragua, there
are isolated studies that suggest that the magnitude of the problem is considerable. For instance, one
small cross-sectional study that used formal developmental screenings revealed a high prevalence
of cooccurring malnutrition, intestinal infections, and suspected delays (Oberhelman et al., 1998).
However, large population-based studies with validated screenings and/or with comprehensive
measures of neurodevelopmental disorders are lacking in the literature for Nicaragua.

On the other hand, valuable information that illustrates the magnitude of developmental delays
and disabilities in Nicaragua is available from indirect methods with population-based surveys
(Instituto Nacional de Información de Desarrollo & Ministerio de Salud, 2013). Nicaragua along
with Honduras and Chile are the only three countries of Latin America that have implemented
child development screening questions within the most recent DHS. For the DHS 2011/2012
Nicaragua, which was conducted during July 2011 to December 2012, surveyed 21,960 households
and subsamples of children aged 7–59 months were identified. The child development module of the survey had five screening questions (ad hoc), one for each of the five domains of the development. These questions were implemented to assess children aged 7–11 months, 12–23 months, 24–35 months, 36–47 months, and 48–59 months of age. The same module was implemented in the DHS of 2011. One limitation of the Nicaraguan DHS is that it does not provide specific clinical information, such as diagnosis codes or severity. For example, screening questions (yes/no) on a DHS are insufficient to determine if the child has or has not a delay in any of the areas of development. Normative sample information and established cutoff with clinical significance are needed for that purpose. Nevertheless, the DHS provides important population estimates, which if complemented with studies that assess the predictive validity of the DHS, could provide useful information for accurately assessing the magnitude of the problem and facilitate the planning of services. Future studies are needed in this area.

Although readers are referred to the source report for details, some key DHS findings deserve consideration (Instituto Nacional de Información de Desarrollo, 2009; Instituto Nacional de Información de Desarrollo & Ministerio de Salud, 2013). Because delayed developmental milestones among children older than 3 years of age are more likely to be evident to parents and thus more likely to be detected in screening instruments, it follows that the DHS estimated proportion of children that do not meet age-appropriate milestones by the age of 3 years could be used as proxy for assessing the prevalence of developmental delays. In this regard, the specific DHS questions for children 36–47 months of age, translated here to English from original in Spanish, were as follows (Instituto Nacional de Información de Desarrollo, 2009): (a) Does the child follow instructions with two or more commands? (receptive communication); (b) Can the child tell you briefly about things that happened? (cognitive development); (c) Does the child play make-believe with other children? (social–emotional development); (d) Does the child engage in competition games that are physical for long periods of time? (motor development); and (e) Can the child dress and undress pieces of cloth? (adaptive development). Although these questions do not represent actual categorizations of developmental delays, they can be considered markers of risk for developmental delays. However, such presumption needs to be confirmed by formal assessments in further studies.

According to the most recent DHS 2011–2012, approximately 15% of children between 36–47 months of age did not meet the age-appropriate milestones for adaptive development and motor development (parent’s answer to the questions was “no”; Instituto Nacional de Información de Desarrollo & Ministerio de Salud, 2013). Risk for delays in the cognitive and social–emotional domains were present in less than 10% (Instituto Nacional de Información de Desarrollo & Ministerio de Salud, 2013), which is unchanged from the previous DHS 2006/2007 (Instituto Nacional de Información de Desarrollo, 2009). In a similar manner, marked disparities were found in socioeconomic indicators. Particularly, those families in poorer areas and from rural locations presented with higher proportions of children at risk for developmental delays. Although it is possible that cultural beliefs regarding age-appropriate development may have influenced parental responses, nevertheless, the DHS child development questions represent a promising approach as a population-based method for the assessment of delays in young children. Further studies are needed to determine the correlation and predictive validity of DHS questions regarding clinical categories and recommended cutoffs for developmental delays. In turn, this information can be used to establish the need for services at the population level. Also, guidelines for the determination of early intervention services need to be adapted to the local context.

It is important to mention that we were not able to find available reports on the prevalence of other neurobehavioral disorders in Nicaragua, such as cerebral palsy, autism, ADHD, conduct disorders, obsessive compulsive disorder, and depression. Prevalence studies are urgently needed in these areas to determine the magnitude and need for services.
CONCLUSION

Despite the recognized importance of ECD globally and the important strides in child survival, a proportion of young children in many low income countries continue to suffer from serious nutritional and health impairments that lead to delays or disabilities in cognitive, fine and gross motor skills, and social–emotional development (Engle et al., 2007; Walker, Wachs, et al., 2007). Although a well of knowledge has accumulated over the years regarding effective early intervention programs for children with or at risk for developmental disabilities, such interventions do not reach those with greatest need. Nicaragua's case illustrates such necessity and requires multi-sectorial approaches to policy and program development in ECD.

In Nicaragua, the lack of implementation of early child development programs which capitalize on existing parental cultural values and inappropriate family practices (e.g., poor complementary feeding practices associated to stunting) in the community are two major obstacles to ameliorate the loss of developmental potential that is occurring. Building both, individuals and community capacities in early childhood education and intervention are essential to sustain and expand program efforts. It is important to mention that we did not find specific data on use of services and provision of specialized care for children with developmental disabilities in Nicaragua. However, based on our experience in the country providing clinical care and seeking services, there is an unrecognized but significant proportion of families of children with developmental delays who demand for early intervention and other specialized services. Although there are no statistics on this aspect, as healthcare providers (two authors are licensed physicians in Nicaragua), we have observed that parents with children with developmental disabilities are constrained in their choices of early intervention services from either public or private sources. In this regard, the few centers that offer early intervention services or parent training programs are exclusively located in urban areas, such as the capital city or a few main metropolitan areas, with rural areas not served at all.

Another important obstacle is the lack of an integrated management system for children with developmental disabilities. Particularly, the communication between professionals that provide services for families with children with developmental delays and/or disabilities is often deficient. Physicians (e.g., neurologist or orthopedics) who provide care for the child rarely communicate their plans in a systematic manner to the physical therapist for example or the personnel that provide other supporting services (e.g., swimming classes, physical education). Addressing these important barriers to family-centered care is the initial step to improve outcomes for children with special healthcare needs (Shannon, 2004). However, we are aware of some important efforts which are being implemented in Nicaragua for families with children with developmental problems. Notably, families have organized themselves to form a family-centered institution (non-profit), referred to as “Los Pipitos,” which work on child advocacy efforts as well as in helping fill the current gap in services (mostly in urban settings but receive referral from all over the country; Los Pipitos, 2012). Los Pipitos offer parent trainings for more than 6 months, which is an important family resource recognized by families. Another not-for-profit organization is “Los Mimados,” which offers free physical therapy and other services. Other organizations that provide a limited scope of services include the Center Melania Carazo and the Home Zacarias Guerra (foster home services and swimming classes). The list is not exhaustive, but most of these resources are located in urban centers.

The following are some of our recommendations for policy makers and funding agencies, with some key questions to be asked in future research and evaluations efforts. Considering all the discussions earlier, to improve the issue of developmental delays in Nicaragua and the related unmet need for services, it is necessary to do the following:

Recommendation 1: Improve knowledge about the main causal pathways of developmental delays and identify populations at risk. Question to ponder: Will an improved caregivers’
knowledge (i.e., parents and providers) about the risk and protective factors translate in favorable developmental outcomes?

Recommendation 2: Implement a national early intervention system to foster infant growth and development through effective adult–child interactional models that enhance social–emotional development as well as cognitive development. Questions to ponder: Will an early intervention system be feasible for the context of Nicaragua? What are the resources needed and what are the expected benefits?

Recommendation 3: Improve or develop adequate early childhood educational facilities (e.g., daycare settings), schools, and other community-based structures. Questions to ponder: Can the current community-based structures be shaped to meet the need for early childhood education? What governmental and external resources are needed to realize this goal?

Recommendation 4: Enhance workforce development of mental health professionals, physicians, and nurses in Nicaragua, emphasizing a life span approach to health and the prevention of disease. Also crucial is the need for developing a wide array of child development specialists such as early interventionists (0–3 years of age focus), speech therapists, occupational therapists, physical therapists, and other area specialists. Questions to ponder: How can international and national collaborations be activated to fill the gap for human capital in Nicaragua, in the areas pertinent to child development?

Recommendation 5: Integrate strategies within the current educational system so that service connections are provided throughout the school years. Question to ponder: What structures exist in Nicaragua that can be linked to the educational and healthcare system to provide continuous support and services for families with children with developmental disabilities?

Recommendation 6: For clinical recognition and intervention of developmental delays, there is a need for the integration of biomedical, nutritional, and developmental strategies within the existing healthcare delivery. Questions to ponder: How does the current healthcare system, both with public and private components, can be arranged to provide integrated services to families and children in Nicaragua? How can community-based participatory approaches be strengthened to enhance the local healthcare infrastructure so that interventions can be sustained and scaled up to promote optimal development and reduce multiple health risks? Can synergistic mechanisms of malnutrition and psychomotor delays in Nicaragua be effectively curtailed with integrated culturally sensitive biomedical and meditational interventions?

Recommendation 7: Increase awareness and sensitization of the healthcare personnel (from the early years of education) regarding the magnitude of developmental disabilities and the human rights that are entitled to citizens with disabilities, which requires an integrated approach. Question to ponder: How can awareness efforts be led by current medical and nursing educators?

Recommendation 8: Provide parent training programs for families with children with developmental disabilities and their caregivers with the goal of improving their quality of life and provide support/stimulation throughout the life span of the individual. Question to ponder: Which parent training model programs can be used to enhance cultural values and increase sustainability by engaging local communities?

Recommendation 9: There is a need for studies focused on ECD in Nicaragua and other countries of the world that explore all the venues identified earlier.

This situation is precarious because failing to address developmental delays in a timely manner leads to serious impairments with detrimental consequences for individuals and their families. Question to ponder: What research infrastructure and partnerships are needed to conduct research in Nicaragua? What funding sources are available to support research efforts?

In summary, there is only limited data regarding developmental delays and related neurodevelopmental disorders in Nicaragua. However, the available information suggests that the magnitude of the problem is significant. The lack of evidence-based programs for optimizing the developmental potential of young children and the absence of a national early intervention system in Nicaragua (i.e., detection, referral, and service components) represent a significant
obstacle for reducing the impact of developmental delays and/or the improvement of developmental outcomes for the nation. Local stakeholders, international agencies and collaborators, and the civil society should work together toward the optimization of ECD as a key population health determinant in Nicaragua.

REFERENCES


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Participatory Processes Applied to Developing Culturally Appropriate Educational Material Among the Ngäbe-Buglé Women of Panama for Domestic Violence Prevention

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The Ngäbe-Buglé is the largest underserved indigenous population in Panama facing extreme health disparities compounded by structural, social, and cultural factors. Contributing factors to the poor health outcomes in this region include extreme poverty, low education, high maternal and infant mortality, alcohol use, and an increasing trend of domestic violence. The present intervention used community participatory processes to develop tailored material within the Ngäbe-Buglé community and training health promoters to deliver health education to the most rural areas. There were 78 health promoters who were trained using the training-of-trainers approach. Promoters distributed the health messages to their communities using the tailored material, the main topic discussed being domestic violence. Almost 7,000 community members received health education, demonstrating increased knowledge and intent to act on information received. Future directions include further funding, research, and education of indigenous groups in Panama on domestic violence.

Keywords: indigenous health; domestic violence; Panama; training of trainers; Ngäbe-Buglé; community participatory processes
Health inequalities are considered to be the “leading health problem” in Latin America (United Nations Development Program, 2010), with the most affected population being the indigenous groups. There are more than 370 million indigenous people worldwide (Department of Economic and Social Affairs, 2009) represented by more than 400 different indigenous populations in Latin America and the Caribbean (Montenegro & Stephens, 2006). Each group follows different dialects, beliefs, and traditions presenting a challenge to public health. The 2010 United Nations Permanent Forum on Indigenous Issues explains that despite the diversity experienced by indigenous groups, the inequities remain constant across groups. This includes society’s neglect and lack of protection of human rights, giving rise to diminished political representation and participation, economic marginalization, poverty, lack of access to social services including health and education, and discrimination. Education is crucial to the growth of women and has direct impact in health outcomes. For example, women with higher education present improved health indicators such as reduced infant mortality (by preventable causes) and ameliorated survival of children. Furthermore, women with basic levels of education face opportunities to improve the family and the community’s income (Murray, 2009).

Traditionally, disparate health outcomes have affected indigenous populations, and it has been well documented within Latin American and the Caribbean regions attributing this disparity to continuous poverty, lack of access to care, environmental changes, incidence of infectious diseases, poor nutrition, loss of traditional health practices, and change in diet and food availability (Pan American Health Organization, 1998). In addition, rights to traditional lands, territories, and natural resources are often central to the indigenous way of life (United Nations Permanent Forum on Indigenous Issues, 2010) but are continuously at risk because of effects of countries’ growth and development, contributing to the continuous cycle of poverty (United Nations Development Program, 2010). Nonetheless, progress has been observed in such forums as the 2007 United Nations’ Establishment of the Rights of Indigenous Peoples Worldwide outlining the declaration to maintain, protect, and develop their traditional medicine and health practices, cultural heritage, knowledge, and art as well as gain access to social and health services (United Nations, 2008).

**Indigenous Groups in Panama**

The Republic of Panama, located in Central America, is composed of nine provinces, three indigenous comarcas or reservations with provincial status, and two comarcas with status of corregimiento or a subdivision of district. According to the 2010 national census, the Panamanian population totaled 3,405,813 people with 417,559 people identified as indigenous (212,451 men; 205,108 women), representing 12.4% of the total Panamanian population. Indigenous populations include eight defined groups: Bokotá, BriBri, Buglé, Guna, Emberá, Naso Teribe, Ngäbe, and Wounaan (Instituto Nacional de Estadística y Censo de la Contraloría General de la República de Panamá, 2010a, 2010b).

**The Ngäbe-Buglé**

Consistent with the global trend, Panamanian indigenous groups face staggering health disparities with 95% of the population classified as living in extreme poverty. Average household income is approximately $300 per year, primarily from migrant, agricultural labor. Originally, two separate groups merged by governmental decree in 1997, as one whole population, the Ngäbe and the Buglé indigenous populations represent 65.5% of all Panamanian indigenous groups,
becoming the largest indigenous population in Panama, and presenting high rates of poverty, malnutrition, and illiteracy. In 2008, it was estimated that 73% of the Ngäbe-Buglé’s households live in extreme poverty (Inchauste & Cancho, 2010). Clearly, these disparities experienced by the Ngäbe-Buglé indigenous populations translate into poor health, limited education, and social, economic, and cultural factors that affect complete families, with the greatest impact on women and children.

The Ngäbe-Buglé are among the most numerous low-literacy group in Panama with 49.5% literacy rate, where men are 72.5% illiterate on average for every 100 illiterate woman (Association of Ngäbe-Buglé Women, 2010). It is suspected that this difference in literacy favoring men is because of the father’s decision to place less importance on girls attending formal schooling especially once they reached the age of puberty when the responsibilities of having a family become of most importance (Vergés de Lopez & Farinoni, 1998). Cases have been reported that it can even be difficult and sometimes unsafe for girls to travel to their distant schools on a daily basis because of the migrant nature of the families. Historically, cases have been reported of the girls being assaulted upon their travels to and from school (Vergés de Lopez, personal communication, September 23, 2013). Furthermore, young girls tend to be married off and become pregnant at young ages, thus not finishing school education.

**DOMESTIC VIOLENCE IN PANAMA**

Domestic violence in Panama has recently acquired notoriety as an important public health issue. For example, the Panamanian Observatory against Gender Violence (Observatorio Panameño Contra la Violencia de Género [OPVG]; 2010) reports a record of 42 violent deaths of women in 2008, rising to 80 in 2009, and in 2010, slightly dropping to 72. The 2009 report of the OPVG called for prompt, decisive action and true collaboration monitoring public policies and international commitments as well as increased concentration on feminicide statistics citing that there is not enough literature on the subject (Alonso, Quintero, Zorrilla, Melo, & Guardia, 2011; OPVG, 2010).

The effects of violence and mistreatment on women can result to psychological suffering such as severe depression, anxiety, symptoms of posttraumatic stress disorder, chronic fatigue, insomnia, eating disorders, isolation, or alcohol and drug abuse. These effects on women reduce their quality of life and may reduce a woman’s potential income, thus impacting the entire family. Women who experience domestic violence face further disadvantage proving less productive at work giving rise to a direct loss to the national production. Abuse in turn affects the performance of children in school, thus future productivity and potentially economic growth. Intergenerational violent behavior teaches children to resolve conflicts in this manner (De Leon, 2012), perpetuating violence and its further impact.

The same year as the 2007 Declaration on the Rights of Indigenous Peoples, Panama also adopted National Law No. 14 against the Domestic Violence implementing improved processes for reporting cases and stricter penalties for perpetrators. The United Nations Women’s Office reported Panama’s high prevalence of domestic violence especially within specific indigenous groups such as the Ngäbe-Buglé (Government Accountability Office of Panama [Contraloría General de la República de Panamá], 2010). In 2012, 46 women reported intimate partner violence (IPV) with merely 8 of those presenting charges against their partner before being killed (SDP Noticias, 2012). There were 64.1% of the women victims of feminicide were younger than 31 years of age, and 40.8% were mothers of young children (UN Women, 2012).
In addition, throughout Panama, the National Survey on Sexual and Reproductive Health (Gorgas Memorial Institute, 2011) reported direct correlation between physical violence and number of surviving children meaning physical violence is higher when there is greater number of children. This relationship is perhaps strongest among those victimized after age 12 years: 26% had in excess of three children in contrast to only 16% who had two offsprings or less. Educational level of male aggressors and female victims is concerning suggesting the less educated are more susceptible to domestic violence. During the 12 months preceding the survey, 10.9% of abused women reported having no education, 12.8% have incomplete primary education, and 14.1% of abused women have only completed primary school. Regarding aggressors of sexual violence, 6.7% had no education, 9.4% had incomplete primary school, and alternatively only 2.8% had higher education (Gorgas Memorial Institute, 2011).

Furthermore, these trends in domestic violence toward women are increasing; in 2012, 2.3% of women per month were killed by their partner, and in the first 6 months of 2013, the rate has increased to an average of 3.5% of women being killed each month in Panama (Morales, 2013). In March 2012, the United Nations Human Rights Council “urged Panama to improve the protection of women and girls and, in particular, to combat people trafficking, domestic violence, and discrimination” (Amnesty International, 2012). Currently under review is a new law specifically against feminicide in Panama, which proposes to enforce stricter regulations on crimes against women. Furthermore, the national annual budget against violence directed at women is limited to $15,000 (USD; U.N. Women, Annual Report 2011–2012) affecting the implementation of meaningful initiatives and programs. In sum, domestic violence in Panama is affected by a combination of economic, structural, social, and cultural factors.

**Domestic Violence Among the Ngäbe-Buglé**

Subsequently, despite a historical tradition of a female leader, and the women’s role in the familial structure and health care, the Ngäbe-Buglé remains a patriarchal society. Danilo Toro describes the culture of machismo as the main ingredient in domestic violence explaining sociologically that there remains a failure of communication between men and women that produces friction in relationships and the lack of equity (Alonso et al., 2011).

Results from a 2005 World Health Organization’s multicountry study on women’s health and domestic violence against women adapted for the Ngäbe-Buglé illustrated a correlation between alcohol consumption and IPV in the Ngäbe-Buglé population, along with strong correlations between alcohol abuse, IPV, education level, number of pregnancies, and number of living children (Cadena, 2012). Independent of gender, indigenous regions of Panama reported higher percentage of alcohol consumption at younger ages (younger than 12 years of age) than that of both urban and rural areas (Moreno De Rivera et al., 2009). Increased alcohol consumption has been observed in this community for a period, impacting domestic violence, including alcohol consumption among women (Gorgas Memorial Institute, 2007). Despite government efforts and community interest in the growing issue of domestic violence against women, programs face low-resource availability.

**Addressing Health and Domestic Violence Issues Among the Ngäbe-Buglé**

Alternatively, responding to the health concerns of the Ngäbe-Buglé community including domestic violence, a health education program was developed by the University of South Florida’s Panama Program (USF Panama). USF Panamanian researchers working along with the
Ngäbe-Buglé community and responding to the National Strategic Plan of Science, Technology, and Innovation developed the health education program termed Integral Health Among the Ngäbe-Buglé Indigenous Population. Initially focusing on general Ngäbe-Buglé health issues, the community requested through focus groups that a domestic violence section be included. The 2-year project consisted of a sequentially developed health education intervention based on qualitative, formative information guided by the community members; development of culturally, linguistically, and literacy appropriate material responding to local needs expressed by the community; implementation of health education intervention; follow-up; and evaluation. This was a community-guided approach that focused on local Ngäbe-Buglé needs. The Panamanian government funded the program by a grant sponsored through the National Secretariat of Science, Technology, and Innovation of Panama.

Subsequently, the community requested the material to be portable, easy-to-use, resistant to the humid tropical environment, and including local information. The community informants also identified the health topics to be included: hygiene, nutrition, environment and the home, the role of the midwife in the community, pregnancy and prenatal care, and domestic violence. This last topic of domestic violence was innovative, presented by the community as a critical problem they face in their daily lives. Through the project, the community participants identified domestic violence (IPV) as an emerging theme in the community. Materials were assembled in small, easy-to-carry flipcharts; art mirrored the Ngäbe-Buglé designs; and included pictures taken from local comarca communities and their members to foster cultural relevance.

In addition, the flipcharts were distributed in easy-to-carry canvas bags among midwives, community health promoters, traditional healers, and outreach workers in the comarca. Two-day training sessions were offered to 78 Ngäbe-Buglé participants. In this train-the-trainer format, the participants became project Promotores or health promoters at their communities. Promotores were expected to educate at least 20 community members each with an expected goal of 800 people receiving the information within the communities. These expectations were exceeded with almost 7,000 community members educated in less than 1 year.

Special Concerns and Barriers Related to Delivery

Delivery of health messages in the community by Promotores was complex. The topic of domestic violence was a delicate subject and new to the community. Health is believed, by the Ngäbe-Buglé, to be a product of a harmonious relationship with the environment, human beings, nature, and the gods. If this harmonious relationship is broken, sickness can take place in a person and affect the entire family. The Ngäbe-Buglé practice traditional medicine and the woman’s role, as community lay midwife, is central to the health of her family because she is often responsible for giving advice, detecting symptoms, and administering treatments. For this reason, women of the community are an important resource, and offering health education interventions, especially to women, are crucial to successfully improving health disparities. Nonetheless, community members mention that all family decisions are handled by male figures in the family.

Service accessibility is compromised by difficult terrain and isolation. Promotores had to walk long hours (up to 8 hours) in dirt roads, cross through rivers, and mountainous terrain to reach their intended populations. The Ngäbe-Buglé lives in scattered small communities of an average of six to eight homes linked by family relations. Previous studies have documented the historical isolation of the Ngäbe-Buglé indigenous population because of dispersion (Cadena, 2012; Halpenny, Koski, Valdes, & Scott, 2012). Difficult terrain is not just problematic in receiving education and accessing health services but also for the treatment and
Domestic Violence Prevention Among the Ngäbe-Buglé Women

control of chronic and infectious diseases and to receive prenatal care. The diverse geography of the Ngäbe-Buglé comarca is extensive; some areas are mountainous, whereas others border the Atlantic Ocean to the North and can only be reached by boat or airlift. Furthermore, the local resources and supplies are limited. One of the government agencies responsible for addressing domestic violence has only one staff person working on intimate partner including several other programs among the entire comarca. Even if a victim of IPV is identified, not much can be done to address the issue, such as the unavailability of appropriate shelters located in central sections of the comarca. Thus, community involvement is key in addressing domestic violence among the Ngäbe-Buglé.

Successes

In the Integral Health project, the first step was obtaining community recognition of domestic violence as a significant problem, initiating a dialogue. Further, the focus became the use of existing networks of community leaders and organizations to work with the Ngäbe-Buglé community to promote sustainability. Women are the most organized group within the community with the growth of Ngäbe-Buglé Women’s Association (ASMUNG for its acronym in Spanish). It is through these outlets that sustainable change will slowly begin, starting with the empowerment of women through education, organized support, and leadership. Local grassroots community organizations proved useful during the delivery of the project intervention.

Summary of Approach

Community engagement was initiated through the use of community-based participatory processes to determine health needs as identified by the community and later train key community members in topics that emerged from focus groups (Israel, Schulz, Parker, & Becker, 1998). Upon the integration of the community participation strategy, the project team identified emerging themes of importance within the Ngäbe-Buglé community including domestic violence, alcoholism, drug use, and self-esteem (Pineda, 2009).

Ngäbe-Buglé community members were recruited for the focus groups and trainings through multimodal recruitment strategies by inviting not just community leaders but health assistants from Ministry of Health community health posts, lay midwives, and key personnel from the existing network of health promoters. Governmental representatives were invited from the National Secretariat for Food Safety and Nutrition, the Ministry of Social Development, Ministry of Health, and the Ministry of Education that serve the rural areas where Panamanian indigenous populations live. Recruitment also included grassroots organizations such as the Association of Ngäbe-Buglé Women and the Association of Natural and Traditional Ngäbe-Buglé Medicine as well as environmental agencies such as the Institute of Agricultural Research and the National Environment Authority. A community liaison with previous experience working in indigenous community training served as the program coordinator and communicated with the Panamanian Indian Health Department in the development and implementation of this program. Active community engagement and participation occurred, and further support of the project was achieved through inclusion of the previously mentioned local organizations.

Consistent with the core of the community participation strategy, this project worked to improve the health of communities through the combination of knowledge and action to produce social change (Israel et al., 1998). Participatory processes where community members and key organizations are involved in all stages proved especially crucial in vulnerable, indigenous groups and ensure the impact and sustainability of a program. This participatory approach working with indigenous communities is essential by allowing promotion of healthy practices from the
ground up and mobilizing community members to champion and use their existing assets toward healthy outcomes. The strategic recruitment of partner organizations and community members, through their knowledge and continuous feedback, contributed information about Ngäbe-Buglé traditional practices to make the training culturally appropriate.

Using the community’s recommendation to provide culturally specific material, the project team consisted of the coordination of collaborative material development with the community. The participatory approach for development of health education material had never been used before with this community, and the results revealed how necessary this integration of this indigenous groups own traditions, designs, language, and others. Over a 2-year period, tailored material in the form of colorful laminated flipcharts with interchangeable slides was created on the topics selected by the community and used to train the network of health promoters. The guidance from the inclusion of the community resulted in greater ownership, attendance, and empowerment as well as strengthened relationships with the existing institutions and organizations within this region (refer to Figure 1 for example of flipchart cover on domestic violence). Consideration was made for the necessity of waterproof material because of geography and a heavy, rainy season. The adoption of a training-of-trainers approach (Assemi, Mutha, & Hudmon, 2007; Corelli, Fenlon, Kroon, Prokhorov, & Hudmon, 2007; Ray, Wilson, Wandersman, Meyers, & Katz, 2012) also increased the reach of the health promoters trained in this capacity. The Ngäbe-Buglé population is rural and home to difficult geography, therefore using health promoters who live in the distant communities allow the health messages to reach even the farthest families. The relevant considerations were essential in making the appropriate material for this specific population.

**Results**

Throughout this project, 78 health promoters were trained in six topics (hygiene, nutrition, environment, healthy pregnancy, role of the midwife in the community, and domestic violence) using
Domestic Violence Prevention Among the Ngäbe-Buglé Women

the flipchart designed for this community and derived from community focus groups and other participatory processes. Promoters then presented the health messages to their communities with 6,878 (36.1% male, 63.9% female) receiving health information. The total number of community participants was more than eight times the original goal of 800 participants. Community organization and inclusion through participatory processes was an effective way to engage with the Ngäbe-Buglé and to create awareness of domestic violence (IPV) in the comarca.

In the course of this initiative, male health promoters were introduced to the topic of domestic violence for the first time. The reaction of community members has been dynamic, were the energetic reactions, and positive responses of participants have determined a need to develop further research and interventions related to domestic violence among the Ngäbe-Buglé communities. Evaluation of the educational intervention showed the highest knowledge increase (45%) on domestic violence during pre- and postknowledge evaluations among all health topics discussed (Table 1). In addition, the reaction to this topic as it was discussed always created positive reactions and dynamic discussions among the groups of community participants.

Through measures of intent to act based on information received, most of the participants also responded favorably to the intervention (Table 2), including further education of their communities, reporting to the local authorities, and use of the educational material.

There were 4,357 people who received information on two or more health topics over a 6-month period. Age distribution of attendees was younger than the age of 20 years (34.1%; n = 2,348), ages 21–40 years (31.4%; n = 2,160), ages 41–60 years (19.6%; n = 1,349), ages 61–80 years (6.3%; n = 436), ages 80 years and older (0.34%; n = 24). The training distribution per comarcal district was Muna, 50.3%; Nole Duima, 14.5%; Nürum, 13.4%; Besikó, 10.4%; Mironó, 8.6%; Kusapín, 1.2%; and Kankintú, 1.2%, with the three most popular topics being hygiene, environment, and nutrition, which will be reported elsewhere. Domestic violence was the main topic in more than 100 trainings reaching 1,242 trained in this topic.

**TABLE 1. PRE- AND POSTKNOWLEDGE TESTS**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percent of Correct Responses</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand washing</td>
<td>41</td>
<td>55</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Bathroom usage</td>
<td>100</td>
<td>95</td>
<td>-5</td>
<td></td>
</tr>
<tr>
<td>Boiling water appropriately</td>
<td>41</td>
<td>59</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Water storage</td>
<td>9</td>
<td>36</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Healthy eating</td>
<td>77</td>
<td>82</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>68</td>
<td>77</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Waste management</td>
<td>73</td>
<td>91</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Role of the midwife</td>
<td>68</td>
<td>82</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Pregnancy/prenatal care</td>
<td>91</td>
<td>82</td>
<td>-9</td>
<td></td>
</tr>
<tr>
<td>Domestic violence</td>
<td>32</td>
<td>77</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

**FUTURE DIRECTIONS**

Within the Ngäbe-Buglé community, organization of women leaders has been central to asserting the woman’s role within a patriarchal society. Investment on education of women and girls in cultivating the tools of resilience and self-esteem can have the great impact in fostering solutions created and sustained by the Ngäbe-Buglé community. Future directions should include further
TABLE 2. INTENT TO ACT ON INFORMATION RECEIVED

<table>
<thead>
<tr>
<th>Do you agree with the following statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I intend to conduct trainings in my community.</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
<td>3 (6%)</td>
<td>42 (89%)</td>
</tr>
<tr>
<td>I hope to train 20 people within a 5-month period.</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>4 (9%)</td>
<td>2 (4%)</td>
<td>40 (85%)</td>
</tr>
<tr>
<td>I am going to promote the trainings in my community.</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (4%)</td>
<td>3 (6%)</td>
<td>42 (89%)</td>
</tr>
<tr>
<td>I want to use the educational materials.</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
<td>4 (9%)</td>
<td>42 (89%)</td>
</tr>
<tr>
<td>I hope to use the help guides before my training.</td>
<td>3 (6%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
<td>5 (11%)</td>
<td>38 (81%)</td>
</tr>
<tr>
<td>I hope to use the help guides after my training.</td>
<td>5 (11%)</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
<td>5 (11%)</td>
<td>35 (74%)</td>
</tr>
<tr>
<td>I will use the forms provided to take attendance and do reports.</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
<td>3 (6%)</td>
<td>41 (87%)</td>
</tr>
<tr>
<td>I will contact the University of South Florida with any concerns.</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>5 (11%)</td>
<td>40 (85%)</td>
</tr>
<tr>
<td>I will contact the community authorities with any concerns.</td>
<td>4 (9%)</td>
<td>3 (6%)</td>
<td>2 (4%)</td>
<td>9 (19%)</td>
<td>29 (62%)</td>
</tr>
</tbody>
</table>

qualitative and quantitative research on domestic violence, including causes, education, evaluation of existing programs, and resources needed. Future steps include reaching a larger number of Ngäbe-Buglé communities, government and private agency involvement (e.g., establishment of shelters, education for women and children, training of men), and developing similar interventions among other indigenous groups in Panama. Long-term follow-up of trained Promotores and their communities should be conducted at regular intervals. Results of these future interventions should offer solutions in the community to diminish the effect of domestic and intimate partner violence. Finally, additional funding is needed, including funding from international nongovernmental and federal agencies as this population in Panama is in ominous need of support to address domestic violence as an important public health problem.

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The Journal of Cognitive Psychotherapy: An International Quarterly is devoted to the advancement of the clinical practice of cognitive psychotherapy in its widest sense. This scholarly journal seeks to merge theory, research, and practice in order to develop new techniques by an examination of the clinical implications of theoretical development and research findings. To this end the journal will publish case studies, theoretical and research articles of direct practical relevance, literature reviews on clinical topics, and articles specifying the clinical implications of topical research. Articles describing the integration of cognitive psychotherapy with other systems are also welcome.

Manuscripts are solicited in the following areas:

1. Case studies. Authors should describe therapeutic procedures in sufficient detail to permit replication by other clinicians and should include measures of outcome and, whenever possible, follow-up. The development and investigation of innovative procedures are especially welcomed.

2. Treatment manuals, including the descriptions of new treatment methods. Such manuals should clearly illustrate the specific sequential clinical interventions. In particular, authors should clearly indicate variations in interventions and their rationales.

3. Theoretical articles. Articles outlining theoretical developments in cognitive psychotherapy are welcomed if they have clear implications for clinical practice that are described in detail.

4. Literature reviews. Such reviews can focus on research demonstrating the efficacy of specific techniques, the practice of cognitive psychotherapy with specific populations, different therapeutic modalities (e.g., group therapy, family therapy), or reviews of assessment methodologies useful in cognitive psychotherapy.

5. Research studies. Such studies should have direct clinical relevance that is well described in the article. The journal also seeks to publish special issues devoted to topics of particular interest, suggestions for which are welcome by the editors.

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