

English Summary

Supporting Children in War: Development of a Psychosocial Support System

Globally, child and adolescent mental health problems present a huge burden for children, families and society. This applies to low- and middle- income countries (LAMIC) as well, and increasingly so for violence-affected settings because of the multitude of (social) stressors contributing to poor mental health. In spite of this burden, the mental health needs of children around the world are seriously underserved. Additionally, there is a scarcity of knowledge and evidence for the effectiveness and feasibility of treatment programs in these settings.

This dissertation presents research that addresses different aspects of the development of a psychosocial care program for children in war-affected countries. Chapter one describes the background, objectives and setting of this research. Research associated to the development of the intervention program took place between 2004 and 2008, in Burundi, Indonesia, Sri Lanka, Sudan and Nepal. The questions underlying the multi-site interdisciplinary study were; (a) how to develop and adapt a multi-layered care package?; (b) what mental health problems and services exist for children in areas of armed conflict?; (c) how feasible, valid, effective and socio-culturally appropriate are the psychosocial interventions in the care package; (d) what is a valid and reliable method of screening children for psychosocial care?, and; (e) what are possible treatment mechanisms of individual psychosocial care?.

Chapter two presents a systematic review of the literature on the psychosocial and mental health care practices for children in war-affected low-, and middle-income countries. Sixty-six publications (12 treatment outcome studies and 54 intervention descriptions, covering a range of treatment modalities) are included in the review. Evaluation studies demonstrate a general lack of empirical evidence with only four empirical studies conducted. While some of the demonstrated treatment effects are promising, the scarcity of rigorous studies, the diversity of researched interventions, and

the conditions and diversity of results make firm conclusions difficult. Meta-analyses of effect sizes demonstrate that treatment efficacy is at best moderate and several evaluations have serious methodological flaws. Moreover, studies are heavily skewed towards countries from former Yugoslavia and Post Traumatic Stress Disorder (PTSD) outcomes. The wider body of literature reviewed (including non-evaluation studies) demonstrates a balance between preventive and curative interventions, with creative-expressive techniques most commonly reported. Unfortunately, the existing literature typically lacks rigor and depth in description of what it advocates, i.e. community-based approaches, cultural adaptations and multi-layered care.

Chapter three presents an epidemiological study into the mental health status of former child soldiers, compared to non-recruited children. We conducted a matched-pair cohort study to compare the mental health status of children recruited to armed forces and armed groups to that of matched never recruited children. The study further demonstrates that, in Nepal, former child soldiers display greater severity of mental health problems (depression-, and post-traumatic stress symptoms, general psychological difficulties and function impairment) compared to never-conscripted children. The difference remains for depression and post traumatic stress symptoms, especially for girls, even after controlling for exposure to traumatic stressors.

Chapter four describes the multi-layered care program around which the dissertation is centred. The different components and their rationale are discussed as well as examples of context-specific ways of implementation or adaptations. The first layer comprises a set of activities that aim to increase community resilience, such as social and peer support; community sensitization and psycho-education; facilitating community mobilization to support children; identifying, facilitating and strengthening existing community resources. The second layer comprises more focused interventions for children who are distressed and present with moderate to serious psychosocial problems and who are at risk for developing psychopathology; interventions include a Classroom Based Intervention [CBI], family support and counseling. The third layer comprises specialized care for severe mental health problems (mainly common mental disorders) through provision of counseling or referral to psychiatric care.

Chapter five describes the development and validation of the Child Psychosocial Distress Screener in Burundi. The CPDS is a brief multi-informant and multi-indicator instrument that is partly context

sensitive. The primary screening instrument is developed to facilitate detection of children with elevated psychosocial distress for a classroom-based intervention, especially as mental health professionals are scarce and context sensitive or validated instruments often unavailable. Concurrent validation, with assessments by a psychiatrist as external criterion, demonstrates good accurateness in detecting indication for caseness for psychosocial treatment in Burundi. Construct validity was assessed by testing the measurement equivalence in a large community sample. A robust and invariant factor structure provides evidence for construct validity of the CPDS in Burundi.

Chapter six describes the cross-cultural construct validation of the screener among samples from four countries. Confirmatory factor analyses are conducted to determine the likelihood of a pre-determined theory-based factor structure between samples. Multi-sample confirmatory factor analyses are conducted to test the robustness of the factor structure per sample. The study demonstrates a 3-factor structure reflecting the theoretical premises of the instrument (child distress, child resilience and contextual factor) in 3 of the 4 samples, albeit with contextual variance. The 3-factor structure is highly robust within each of the samples, indicating construct validity. The instrument assesses a common and highly stable theoretical construct (i.e. non-specific psychosocial distress) across three settings. The manifestation of the construct is context-specific. Sample-specific deviations to the core factor structure prevent cross-cultural comparison of scores and confirm the importance of contextual adaptation in each specific setting. Because of brevity and the ability to be administered by non-specialists, the CPDS can respond to current needs for an instrument of triage to screen for non-disordered distress among large child populations in complex emergencies.

Chapter seven presents an evaluation study of a school-based psychosocial group intervention. A cluster randomized controlled trial was employed to evaluate the manualized 15-session Classroom-Based Intervention (CBI). Children ($n=325$) with elevated psychosocial distress were allocated to either treatment ($n=164$) or waitlist group ($n=161$). Results demonstrate moderate short-term beneficial effects for improving social-behavioral and resilience outcomes among subgroups of children exposed to armed conflict. The intervention reduced psychological difficulties and aggression among boys, increased pro-social behavior among girls and increased hope among older children. The intervention did not result in reduction of psychiatric symptoms. The chapter concludes that CBI can be introduced as a secondary prevention intervention in conjunction with more targeted and specialized services for symptomatic children.

Chapter eight discusses a qualitative study on the direct and indirect beneficiaries' perspectives on counseling in Nepal. Stakeholders generally hold a positive view on the relevance, acceptability and applicability of the intervention. Clients are mostly very satisfied with the overall service, describing the intervention as supportive and helpful. At the same time counseling does not always match clients' expectations resulting in moderate levels of perceived satisfaction of needs. Matters of ongoing training and supervision, confidentiality and integration of counseling within mainstream services need to be addressed.

Chapter nine presents a conceptual overview of the cultural challenges of counseling in Nepal. The adaptations focused on matching the intervention to the socio-cultural context. Adaptations were made with regard to the therapeutic relationship, conceptualization of the self, levels of introspection and abstraction, and local perspectives on illness and healing. The chapter takes a middle position in the dilemma on the appropriateness of transfer of western-style intervention to non-western settings, stating that one has to be careful when introducing new approaches not to undermine pre-existing ways of dealing with distress, while one has to be equally careful in condemning the importation of approaches just because they are new or western. The feasibility of western-style treatment approaches is not a priori regarded as unattainable, but the importance of adaptations based on the socio-cultural context is emphasized.

Chapter ten presents a study that aimed to increase conceptual understanding of the key working mechanisms and treatment processes of counseling in Burundi. The study carried out eleven empirically grounded $n=1$ studies with children (11-14 years) screened for depression and anxiety, who received 8-10 sessions of individual counseling. Five treatment mechanism continuums appeared to be associated with outcome trajectories: client centeredness, therapeutic alliance, active problem-solving, trauma-focused exposure and family involvement. Increased presence of these variables appears associated with better outcomes. In contrast, cases that demonstrate no change are characterized by a heavy focus on: counselors' norms, containment & self-control, unstructured retelling and explicit avoidance, advice oriented problem solving, and non-inclusion of family members. Distinct clustering of outcome trends per therapist are present. The findings suggest that integrative counseling, which combines universal therapist variables with active use of specific

therapeutic techniques and a systemic perspective, may be an adequate strategy to treat mental health symptoms of children in Burundi.

Chapter eleven presents a practice-driven evaluation of the multi-layered care package through a set of indicators; (a) perceived treatment gains; (b) treatment satisfaction; (c) therapist burden; (d) access to care; (e) care package costs. Across four settings in two continents ($n= 29,292$ children), beneficiaries report high levels of client satisfaction and moderate post-treatment problem reductions. Service providers report significant levels of distress related to service delivery. Cost analyses demonstrate mean cost per service user to vary from 3.46 to 17.32 € depending on country and specification of costs. The results suggest that a multi-layered psychosocial care package is feasible and satisfactory in covering substantial populations of distressed children through different levels of care. Future replication should address therapist burden, cost reductions to increase financial sustainability of the program, and increase evidence for treatment efficacy and effectiveness.

Chapter twelve, the epilogue, reflects on the development of mental health and psychosocial support for war-affected children by proposing a set of key policy and practice recommendations and considerations to overcome the treatment gap for conflict-affected children in low- and middle-income countries. The five key areas of attention are: employment of a care package approach; increase of the feasibility of care; improvement of access to services; increase of evaluated and evidence-based care, and; increase of understanding and theory formation of treatment spanning effective treatment mechanisms and a developmental perspective. In short, we need to know better what works, how it works and how it should be delivered before ultimately scaling up psychosocial and mental health services.