School-based Mental Health Interventions for Refugee Children and Adolescents: A Review of the Evidence So Far

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Abstract:

As the global refugee population continues to grow and the conflicts displacing them continue to stretch on longer, more and more refugee children every year will need schooling in their host countries. These children face many challenges and barriers to receiving a good education including language and cultural barriers, poverty, and interruption of their education in their country of origin. Many of these children are traumatized by the events leading to their departure from their country of origin and have mental health concerns in addition to the other barriers they face. Schools in host countries can be sources of stress for these children, but they can also be important settings for interventions aimed at preventing and treating mental illnesses that can result from the traumas they have faced. This paper reviews the evidence for school-based mental health interventions for child and adolescent refugees. A wide variety of interventions have been delivered in the past two decades, mostly focusing on psychosocial supports and psychotherapies. While a number of non-randomized observational and quasi-experimental studies have shown evidence that school-based interventions can improve subjective wellbeing as well as objective measures of symptoms of post-traumatic stress disorder, depression, and anxiety, the overall strength of the evidence is weak. More randomized trials with larger sample sizes are needed to better characterize the effectiveness of these interventions, and interventions need to be larger in scope and target multiple layers of stressors to achieve meaningful benefits for child and adolescent refugees.

Introduction

The global population of forcibly displaced people nearly doubled between 1997 (34 million) and 2016 (66 million). As of 2022, more than 100 million people worldwide are estimated to have been forcibly displaced - 32.5 million are refugees (those who left their country of origin), while 53.2 million are internally displaced persons (IDPs), and 4.9 million are asylum seekers. Children under the age of 18 comprised 36.5 million (41%) of forcibly displaced people at the end of 2021.² Most refugees were settled in neighboring countries of first asylum. Only 15% were settled in highincome countries like the United States, United Kingdom, France, and Germany. While refugee camps are the classic image of the refugee experience, the current reality is that more refugees live in urban settings in countries of

first or second asylum than in camps. Refugees are also spending longer and longer before being resettled as conflicts become more complex and long-lasting than previously. As a result, children are now spending more and more of their childhoods as refugees prior to being resettled. These trends also result in growing strain on urban education systems where large numbers of refugees are arriving and staying for prolonged periods.^{3,4}

Mental health among forcibly displaced children

Mental health concerns among the
refugee population - especially the pediatric
refugee population - have long been recognized
as a priority area for host countries and
communities. Many young refugees experience
a variety of traumatic events before arriving in
host countries. In one observational study of

unaccompanied asylum-seeking children arriving in Norway, 78% of adolescent boys reported experiencing physical abuse and 78% reported the loss of a close relative. Ten percent reported experiencing sexual abuse, and 58% reported witnessing violence against others. When asked to name a "worst incident" from their trauma history, the most common responses were "a life threatening episode" (33%), "witnessing cruelty against others (22%), and 'experiences in prison' (20%). These traumatic events have negative health consequences for years following the event itself. Research on adverse childhood experiences (ACEs) has demonstrated increased risk of depression, suicidality, and substance abuse in adults who experienced at least one ACE.6 In the study of asylum-seekers in Norway, nine percent met DSMV-IV criteria for major depressive disorder, 31% met criteria for post-traumatic stress disorder (PTSD), and 42% met criteria for any psychiatric disorder.

Systematic reviews of mental health and learning problems among refugee children and adolescents report similar results. One systematic review found increased rates of depression, suicidality among refugee children and adolescents compared to the general population in their host country and estimated the average prevalence of depression among this population is 33%. In another systematic review of learning problems in refugee children, studies generally found increased rates of mental health problems including attention deficithyperactivity disorder (ADHD), oppositional defiant disorder (ODD), and depression in refugee adolescents compared with non-refugee peers.8

A wide range of factors affecting mental health among refugees has been described by previous research. Social ecology is a model frequently used to group these factors into individual-, family-, and community-level factors that modulate the effects of traumatic

experiences on individuals' mental health.9 Distinguishing between pre-migration and postmigration factors has also been emphasized by the literature. Among refugee children with mental health problems in a systematic review, pre-migration trauma was a commonly identified risk factor. 8 Post-migration factors including experiences with discrimination, poverty, and stress over the asylum process in host countries have also been identified as contributors to stress and anxiety among adolescent refugees. 10 A simple schematic for categorizing factors affecting mental health can be found in Table 1. All of these factors have the potential to elevate or mitigate the risk of mental health disorders among refugees. They are also important modulators of the effects of preventive and therapeutic interventions on mental health. Family-level factors such as household size and the presence of both parents at home were found to be important modulators of the effects of a school-based intervention for children in waraffected Burundi.11

Table 1. Simple schematic for categorizing factors affecting mental health in refugee children and adolescents			
	Pre-migration	Post-migration	
Individual	Experiencing or witnessing violence in home country or country of first-asylum.	Age, sex, language proficiency in host country. Experiencing imprisonment or illness during migration.	
Family	Losing family members to violence prior to migration. Parent socioeconomic status in	Presence of family in host country. Parental understanding of and engagement with educational	

	country of origin.	system in host country.
Community	Culture of education in country of origin. Cultural norms surrounding mental health and mental health care in country of origin.	Asylum process/require ments in host country. School class composition and classmate support.

Therapies for common psychiatric disorders

Therapies for children and adolescents experiencing depression, anxiety, acute stress disorder, and PTSD are not as well studied as those for adults with similar conditions. The WHO recommends trauma-focused cognitivebehavioral therapy (TF-CBT, individual or group-based) or eye movement desensitization and reprocessing (EMDR) therapy for children and adolescents suffering from PTSD but does not make specific recommendations for bereavement or acute stress in this age group. 12 CBT is also recommended as an effective psychotherapy for children and adolescents with depression and anxiety disorders despite generally modest treatment effects in clinical trials. 13, 14

Schools and their role in the pediatric refugee experience

Schools are commonly thought to be crucial resources for refugee children and adolescents. They are a contact point for accessing social services for children and families, a site where social-peer relationships can be built, and settings that encourage a sense of belonging to the host community and culture for children and adolescents. According to the United Nations High Commissioner for Refugees (UNHCR), 68% of primary-school-

aged child refugees attended primary school and 37% of secondary-school-aged refugees attended secondary school worldwide. 4 While refugee children who settle in high-income countries like the U.S. and European nations are more likely to attend school, spending time in countries of first-asylum with lower rates of school enrollment for refugees can affect their integration once they arrive. For children and adolescents who do attend school, this setting can offer a sense of inclusion and social support to refugee children, but they can also be settings in which children are exposed to xenophobia, discrimination, and bullying.^{3,15} Some immigrant and refugee children even face barriers to enrollment from schools and school systems themselves. 16,17

Many school-based interventions have been piloted and show promise in shifting the balance toward schools as protective influences on refugee children's mental health. This paper aims to review the evidence of their effectiveness and examine features that make them successful.

School-based interventions for child and adolescent mental health

Interventions for mental health in refugee children and adolescents tend to involve providing a mix of clinical services and broader social supports in a school or other community setting. A systematic review of literature describing school-based interventions addressing "emotional, social or behavioral difficulties" among refugee and asylum-seeking children found most were based on verbal processing, creative art techniques, or both.¹⁸ Verbal processing interventions include principles of CBT, TF-CBT, EMDR, and narrative exposure therapy (NET) (Table 2). Creative art techniques include music therapy, creative play, drama, and drawing. The interventions studied were widely variable in terms of duration (generally 2 to 16 weeks), participant selection (some random

selection, some by teacher referral, some with entire classes enrolled), and the involvement of teachers and parents. The quality of the study designs was also variable, with only 4 of 21 meeting criteria for the highest level of quality. Interventions using verbal processing and creative art techniques were found to have statistically significant effects on symptoms of anxiety, depression, and PTSD as well as child behavior and self-reported wellness measures.¹⁸ Significant improvements were seen in both individual and group settings as well as in shortand long-term interventions.¹⁸

Table 2. Summary of psychotherapeutic techniques		
commonly used for anxiety, depression, and PTSD		
Technique	Technique Description	
Cognitive	Psychotherapy based on teaching	
Behavioral	patients to recognize and change	
Therapy	unhelpful patterns of thought and	
(CBT)	behavior that lead to depression,	
	anxiety, and other symptoms. ²¹	
Trauma-	Addresses distorted or upsetting	
focused CBT	beliefs related to experienced	
(TF-CBT)	traumas and children's skills to help	
	them cope with ordinary life	
	stressors. ²²	
Narrative	Best known for use in traumatized	
Exposure	communities including refugees.	
Therapy	Helps individuals establish a	
(NET)	coherent life narrative in which to	
	contextualize traumatic	
	experiences. ²³	
Eye	Clinician-guided exercises designed	
Movement	to identify negative thoughts and	
Desensitiza-	sensations associated with past	
tion and	traumatic events and teach patients	
Reprocessing	to deliberately process these	
(EMDR)	thoughts and feelings in a different	
Therapy	way to promote desensitization and	
	healing. May or may not involve	
	sensory techniques including eye	
	movements, sounds, or tactile	
	stimuli. ²⁴	

A more recent systematic review focused only on randomized controlled trials of community-based mental health interventions

for child and adolescent refugees and asylumseekers in high-income countries. 19 Across the three RCTs included, there was no significant difference between intervention and waitlist control groups in any of the primary outcomes studied (symptoms of PTSD, symptoms of depression, and symptoms of psychological distress). There was also no significant difference between intervention and control groups in the secondary outcome of child behavior. 19 The included RCTs were relatively small with fewer than 20 participants per condition arm in two of the three studies. There was "some concern" for bias in the reporting of some of the outcomes as well, so confidence in the results of these RCTs was rated as "low" or "very low" by the reviewers.

Location/setting:

There is no clear evidence that one setting works better than others. Non-RCT studies have shown interventions in a variety of settings including schools, refugee camps, and other clinical settings to be effective at reducing symptoms and improving functional outcomes and subjective wellbeing. ¹⁸ Of 40 adolescents who had recently finished receiving schoolbased mental health services in the UK, most (68%) felt schools were the best place to receive such services. Convenience, fear of unfamiliar clinical settings, and established relationships with teachers were commonly-cited reasons for preferring school to clinic settings for mental health services. ¹⁰

Licensed clinicians vs. other trained community members:

Several studies have examined the question of whether licensed clinicians need to administer mental health services, or whether members of the lay population can be trained to deliver interventions effectively. This question is especially salient in low and middle-income countries where clinical resources are more

scarce and limited access to licensed clinicians is a major barrier to delivering services to affected youth. Results have been mixed. One cluster-randomized trial of a package of interventions delivered by trained "para-professionals" found no significant difference between intervention and control groups unless moderating factors like household size and composition were introduced. The study's authors note that while previous studies have shown some benefits in low- or middle-income countries, delivering CBT-based therapies with trained clinicians as recommended by the WHO is likely preferable in high-income settings with the resources to do so. 11,12

Discussion and conclusions

This paper aimed to review the evidence of effectiveness for school-based mental health interventions targeting child and adolescent refugees. Its secondary aims were to describe features that make such interventions effective and to extract any information or lessons that might help clinicians to care for this vulnerable population in a primary care setting.

The evidence in favor of school-based mental health interventions for refugee children and adolescents is currently weak. Three small RCTs conducted over the past 10 years found no evidence that such interventions reduced symptoms of PTSD, depression, or psychological distress, but these studies were small and not statistically powered to detect modest benefits.¹⁹ It should be noted that the evidence for these psychotherapies positively affecting symptoms of PTSD, depression, and anxiety in children and adolescents in a more clinical setting is modest at best. 13,14 The literature supporting these interventions is largely based on non-randomized studies with observational or quasi-experimental designs. They evaluate interventions mostly based on cognitive-behavioral or creative expressive

principles, and they use a wide variety of delivery methods in a wide variety of settings.

Group and individual programs have shown benefit, as have short- and long-term interventions. Some evidence suggests a subjective preference for school-based mental health services over other community settings like clinics, but more objective measures of symptom relief and functional impairment have been shown to improve with interventions in a variety of settings including in refugee camps. Interventions based on verbal processing (CBT or TF-CBT, NET) have modestly more evidence supporting their effectiveness than creativeexpression-based interventions, but both have helped child and adolescent refugees feel better about themselves and report improved functional outcomes relative to non-intervention peers. Interventions delivered by trained clinicians as opposed to lay "para-professionals" appear more effective.

While these non-RCT studies demonstrate positive outcomes in psychiatric symptoms, functional impairment, and subjective wellbeing, the overall confidence in these effects remains low due to methodological issues with study design or delivery of the intervention itself. Based on these results, no one form of intervention is clearly superior to others in this population, but some variation of delivering CBT or NET-based therapies in conjunction with social supports may be helpful.

Apart from the marked heterogeneity of interventions and weak evidence of effectiveness, a major theme of this research is delivering mental health care to refugee children and adolescents is highly complex. Many cultural, socioeconomic, and clinical factors separate them from their host communities, so it is perhaps not surprising that providing mental health services to this group is especially difficult and fraught with complications.

A useful model for approaching this complex landscape of mental health

interventions is proposed by the Inter-Agency Standing Committee Reference Group on Mental Health and Psychosocial Support in Emergency Settings (Table 3). In this model, interventions are grouped according to which layer of social support and mental health services they target. ²⁰ Most of the interventions included in systematic reviews of the literature target layers involving psychosocial supports (social supports, recreation, creative expression activities) and access to mental health services (CBT-based therapies in schools), but few have been the multi-modal, multi-layered interventions that comprise the highest level of that framework.

Table 3. Inter-Agency Standing Committee intervention pyramid for mental health and psychosocial support in emergencies

psychosocial support in emergencies		
	Pyramid layer	Description and examples
	Social considerations in basic services and security. Community and family support.	Emphasize community foundations. May include interventions such as cultural and recreational activities and peer support (e.g. sports development, art/dance/drama therapy, creative expression, psychosocial and educational support).
 4. 	Focused, non-specialized care. Specialized services.	Emphasize professional care. May include non-specialized interventions for those in distress or specialized interventions for the treatment of diagnosed conditions including PTSD, depression, and anxiety using CBT and other psychotherapies.

5.	Multi-modal,
	multi-layered
	interventions.

Interventions that incorporate a mix of services targeting multiple pyramid layers, focusing on prevention and treatment, and being delivered by multiple groups or actors across different sectors.

Support is growing for more of these interventions because of the growing recognition of the complexity of addressing mental health in refugee children and adolescents. Refugee adolescents themselves, when asked for their recommendations to better support future refugees, recommended general assistance with language acquisition, making friends, and help with asylum applications in addition to better mental health services. 10 This may explain why interventions limited to only mental health services or social supports demonstrate poor evidence of effectiveness. Future studies therefore need to be more holistic in their approach. They may deliver mental health services at school, family supports at home, and advocacy for more transparent asylum processes to approach mental health from multiple angles.

The implications of this research for primary care physicians (PCPs) are less clear than for policymakers, teachers, and mental health practitioners. Primary care providers are still important providers of mental health services for their child and adolescent patients. For those refugees who are not yet wellintegrated into their school system or who experience bullying, visits with their PCP can be an important source of services. Second, it is clear from the literature that factors outside of school affect children's mental health and modulates the effects school-based interventions can have on it. An important role of pediatricians and family physicians has always been to screen for social determinants of health

during visits, and this research further emphasizes how helpful that can be in identifying stressors or barriers to receiving needed mental health services. Finally, this research makes it clear that PCPs in the community still need to advocate for humane policies for their refugee patients. More transparent asylum processes, funding for overcrowded schools, and more widely available language supports for government services would all contribute to alleviating stress on young refugees and their families. All these efforts combined are likely necessary to combat all the trauma and stress that threatens the futures of young refugees.

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