An Overview of Mental Health in the Child and Adolescent Refugee Population

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Abstract
The child and adolescent refugee population is a unique and vulnerable group. Providing healthcare for this population during the resettlement period is a complex task. Healthcare providers must be cognizant of the psychological stress endured by refugees and the subsequent mental health consequences. Unsurprisingly, the current literature suggests that the prevalence of mental illness in child and adolescent refugees is higher than the general population. This paper is an overview of child and adolescent mental health and strives to provide key insights regarding risk and protective factors, screening, diagnosis, and interventions. The results of this research illuminate the complexity of the refugee population and highlight the need for further robust research.

Introduction

The global refugee population has continued to increase over the years and by the end of 2020 there were 26.4 million refugees worldwide. It is estimated that at least 42% of refugees are less than 18 years old.[1] For context, 30% of the world's population is comprised of children and adolescents.[2] Providing healthcare to the refugee population is a complex task in itself and special attention should be paid to children and adolescents. In addition to medical screening (i.e. infectious diseases, nutritional concerns, etc.), it is extremely important for healthcare providers to pay close attention to mental health. Per the UN Refugee Agency, a refugee is defined as "someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion."[3] The exposure to psychological stress is inherent to this definition, and many refugees experience violence, poverty, war, and displacement in their country of origin. Additionally, resettlement can be a stressful time as child and adolescent refugees acclimate to a new and markedly different culture. Examples of resettlement stressors include entering a new education system, learning a new language, and facing bullying and racial discrimination.[4] The cumulative exposure to these stressful experiences can result in adverse mental health outcomes.[5] Thus, it is extremely important that close attention is given to the mental health of child and adolescent refugees.

This paper will provide a high-level overview of the current state of research on child and adolescent refugee mental health. Given the large breadth of this topic and abundance of research, the scope of this paper is narrowed through focusing on 1) the resettlement period and 2) refugees' experiences in high-income countries. The decision to narrow the scope in this manner is to provide the most useful and tactical information for healthcare providers at the International Family Medicine Clinic at the

University of Virginia and other refugee clinics nationwide.

Prevalence

Historically, there has been a lack of high-quality research on the prevalence of mental illness in child and adolescent refugees. The pitfalls of previous research include 1) reliance on self-reporting of mental illness, 2) limited geographic locations, and 3) narrow focus on post-traumatic stress disorder (PTSD).[6] Recognizing this gap in the literature, Blackmore et al. conducted a systematic review and meta-analysis on this topic in 2019. This research included refugees and asylum seekers. However, the majority of the studies were comprised of solely refugees. Their research included eight studies and a total of 779 subjects. A key inclusion criterion was that the diagnosis of mental illness must have been made through a one-on-one interview with a mental health professional and with a validated assessment tool. Of note, it is unclear how the authors determined the validity of the assessment tools. The results of their study are displayed below.

Table 1: The Prevalence of Mental Illness in Children and Adolescents

Mental Illness	Prevalence	
	Refugee Population	Global Population
Posttraumatic stress disorder (PTSD)	22.71% (95% CI 12.79−32.64)[6]	--
Depression	13.81% (95% CI 5.96−21.67)[6]	2.6%[7]
Anxiety disorders	15.77% (95% CI 8.04−23.50)[6]	6.5%[7]
Attention-deficit/hyperactivity disorder (ADHD)	8.6% (1.08−16.12)[6]	3.4%[7]
Oppositional defiant disorder (ODD)	1.69% (95% CI −0.78 to 4.16)[6]	3.6%[7]

In addition to prevalence statistics of refugees, this review and meta-analysis provided other important insights. First, the comparison of mental illness prevalence among refugees and the general global population is noteworthy. Strikingly, there is a greater prevalence of mental illness in the refugee population, excluding ODD. In regards to PTSD, a 2014 meta-analysis suggested that 15.9% of children and adolescents exposed to trauma will develop PTSD compared to 22.7% in refugees.[8]

Interestingly, the prevalence of each specific mental illness varied depending on resettlement time. In the first two years after displacement, rates of PTSD, depression, and anxiety were higher. Alternatively, for those displaced for more than two years, rates of ADHD were higher. This infers the importance of mental health support during the early resettlement period. The results of Blackmore et al. substantiate the critical need for mental health support among refugee children and adolescents.

Risk and Protective Factors

Risk and protective factors for mental health can be divided into two sets – preflight and post-flight. There is a considerable body of research on preflight factors that impact refugees' mental health. The most notable risk factor is previous trauma (exposure to violence, war, etc.).[9] During the post-flight period, child and adolescent refugees are tasked with navigating a new and complex environment. A few of their challenges include learning a new language, enrolling in a new school (after perhaps a lapse in education), and facing discrimination. Recently, there has been an influx of research that explores the correlation between resettlement factors and mental health.[4] In terms of improving mental health outcomes, healthcare providers have an opportunity to impact resettlement factors thus, this new research is of great interest. Fazel et al.

conducted a systematic review of risk and protective factors that correlate to the mental health of child and adolescent refugees. This research focused on high-income countries and the resettlement period.[4] They divided risk and protective factors into several domains: individual, family, community, and societal. A high-level overview of their relevant findings is displayed below.

Table 2: Summary of risk and protective factors[4]*

Factor	Domain Assessed	Risk or protective factor
Exposure to premigration violence	Individual	Risk
Female sex	Individual	Risk
High parental support and family cohesion	Family	Protective
Self-reported support from friends	Community	Protective
Perceived discrimination	Community	Risk
Exposure to postmigration violence	Individual	Risk
Self-reported positive school experience	Community	Protective
Several changes of residency in host country	Family	Risk
Parental exposure to violence	Family	Risk
Poor financial support	Family	Risk
Single parent	Family	Risk
Parental psychiatric problem	Family	Risk

**Listed from greatest to least number of supporting studies*

This research highlights modifiable resettlement factors in high-income countries. Consequently, this research informs public policy related to refugee resettlement. For example, future policy should focus on stability of residence, creating employment opportunities for refugee adults (which would accordingly provide familial financial support), and fostering a supportive educational experience.[4]

Screening

Screening for mental health illness in the child and adolescent refugee population is complicated by several factors, most notably language barriers and cross-cultural differences. It is critical that healthcare providers use an interpreter, set aside ample time, and be cognizant of social factors (illiteracy, intimate partner violence, etc.).[10] In terms of specific screening tools, there is significant discourse in the literature – a gold standard does not exist.

Gadeberg et al. conducted a systematic review of research studies in which the main purpose was to validate a screening or measurement tool for refugee children and/or adolescents. The results of the study propose seven screening tools.[11] The majority of these assess PTSD, including the Child Post-traumatic Stress Disorder Symptom Scale Interview format (CPSS-I), Reaction of Adolescents to Traumatic Stress questionnaire (RATS), the UCLA PTSD Index for DSM-IV, the Post-traumatic Stress Symptoms in Children (PTSS-C) and the Impact of Event Scale (IES). The other two validated tools, the Hopkins Symptom CheckIist-37 (HSCL-37 A) for adolescents and the Child Behavior Checklist (CBCL), assess a wide range of mental illnesses related to emotional distress and maladaptive behavior. Of note, this review reported a lack of assessment tools for children under the age of six.

The Refugee Health Screener-15 is frequently used to screen newly-arrived refugees for mental health illness such as posttraumatic stress disorder, depression, and anxiety.[12] However, this tool is validated only for refugees aged 14 years and older. Otherwise, screening tools that are used in the general pediatric population can be used for refugees. For example, the Strengths and Difficulties Questionnaire and the Pediatric Symptom Checklist. Both of these aforementioned screening tools are available in several languages.[10]

Diagnosis

Diagnosis of mental illness in the refugee population is complicated by cultural differences. For example, the refugee population is more likely to express mental illness through somatic complaints.[10] Thus, it can be difficult to make a mental illness diagnosis based upon the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5).[13] To aid with mental health encounters with refugees, the DSM-5 includes a "Cultural Formulation Interview." This guide serves to enhance clinical understanding and decision-making through illuminating a patient's cultural identity and cultural conceptions regarding mental health.

With cultural differences in mind, the DSM-5 can be used to make mental illness diagnoses. It is helpful to review the diagnostic criteria for children and adolescents versus adults. In posttraumatic stress disorder, the diagnostic criteria are identical for adults and children older than six years old. In children less than six years old, specific symptoms are expressed differently – for example, children may reenact traumatic events during play or have disturbing dreams without content related to trauma. This criterion includes: exposure to a traumatic event, intrusive symptoms associated with the traumatic event, avoidance of stimuli associated with the event, negative alterations in mood/cognition, alterations in arousal/reactivity, duration of greater than one month, and significant distress or impairment in functioning.[13]

In depression, the diagnostic criteria for children and adolescents versus adults are also similar. At least five of the following symptoms must be present for two or more weeks (and one symptom must be decreased mood): depressed mood (or irritable mood in children), anhedonia, weight change or appetite disturbance (failure to achieve expected weight gain in children), insomnia/hypersomnia, psychomotor agitation/slowing, fatigue, feelings of worthlessness, decreased concentration, or suicidal ideation.[13]

In regards to generalized anxiety disorder, the adult criteria for diagnosis are as follows: excessive worry/anxiety about various daily events (for greater than six months), difficulty controlling the worry, three of six associated symptoms (restlessness, fatigue, impaired concentration, irritability, muscle tension, and/or insomnia), symptoms not due to medical condition, and significant social/occupational dysfunction. For the diagnosis in children, only one associated symptom is required. Generalized anxiety disorder can also present as worry about performance in school or sporting events, worry about catastrophic events, or perfectionism.[13]

Interventions

Providing child and adolescent refugees with mental illness interventions is quite multifaceted and requires addressing multiple domains such as housing, finances, family life, and education.[9] Unfortunately, high-quality research on specific techniques is lacking. In 2017, Fazel et al. conducted a literature review which outlines mental health interventions for child and adolescent refugees in high-income settings. They divided interventions into the following

categories: specific mental health interventions, parenting and family interventions, school and peer interventions, and interventions for contextual stressors.[9]

Individual Interventions

In general, when treating mental illness in children and adolescents, psychosocial interventions should be utilized first. This approach excludes circumstances of psychosis or mania – situations in which medication is require.[14] The literature on specific mental health interventions focuses on PTSD and includes narrative exposure therapy (a technique during which the patient establishes a chronological outline of their life, including traumatic events and positive events[15]), trauma-focused cognitive behavioral therapy, and eye-movement and desensitization therapy.[9]

After failing psychosocial interventions, medication should be prescribed if it has been shown to be effective for the presenting condition. Unfortunately, there are limited evidence-based pharmacological interventions for children and adolescents. In regards to posttraumatic stress disorder, selective serotonin reuptake inhibitors and adrenergic medications (guanfacine and prazosin) have been used off-label.[16] Fluoxetine is Food and Drug Administration-approved for major depressive disorder in children greater than eight years old. There is limited research on pharmacologic interventions for generalized anxiety disorder.

Parenting and Family Interventions

Parenting and family interventions are a substantial component in mental illness prevention. In the general population, family dynamics play a significant role in a child's psychological well-being. In the refugee population, families are often separated and parents are often working through personal traumas. Moreover, as children and adolescents assimilate into a new culture, this can often cause familial tension due to the parents' desire to maintain their home culture.[17] Thus, it is even more important to address familial and parental well-being in an effort to prevent the cascade of mental health illness across generations. Thus, Fazel et al. propose the importance of preventing and treating parental mental health in order to best serve children and adolescents. Additionally, family engagement with local structures (i.e. schools) as well as cultural immersion and acceptance has been shown to improve mental health outcomes in child and adolescent refugees. In terms of specific family and parenting interventions, the research suggests a positive correlation with mental health outcomes. However, there is lack of robust research in this area and it is difficult to make specific intervention recommendations. The school setting also plays a role in mental health prevention through language classes, supportive teacher-student engagement, and inclusive classroom environment. In early childhood (ages 0-4), preschool-based interventions include creative expression workshops and sand play, both of which allow children to express their emotions through art.[5]

Contextual Stressors

There have been few studies which correlate contextual stressor interventions to child and adolescent refugee mental health. However, it is clear that these stressors (housing instability, financial insecurity, employment, etc.) contribute to mental illness in refugee populations. Consequently, it is vital to support refugee families in these areas.

Other Considerations

It is also important to recognize the real and perceived barriers to accessing mental health care in the refugee population. Refugees are faced with navigating a new and

often complicated healthcare system that is vastly different from that in their home country.[17] Additionally, the concept of mental health may be misunderstood or stigmatized in their culture. Lastly, children and adolescents rely on parental figures to access mental healthcare. Parental figures may face financial difficulties, transportation issues, time constraints, and illiteracy which make access to services challenging.[9]

Conclusion

This paper has provided a high-level overview of the current research pertaining to child and adolescent refugee mental health. Though there has been an influx of research on refugees, there remains several gaps in the literature regarding prevalence, assessment tools, and interventions for mental illness in children and adolescents. There have been several recent systemic reviews and meta-analyses on these specific topics, however, the results have not been conclusive. The current discourse illuminates the difficulty in conducting research within the refugee child and adolescent population.

On a more granular level, this paper has highlighted the high level of complexity in individual refugee care. Language barriers and cultural differences are the most obvious challenges encountered. However, there are several other psychosocial factors, especially pertaining to mental health. Healthcare providers in high-income countries have the opportunity to positively impact refugee's mental health during the resettlement process. It is vital to take a preventative approach and to consider multiple facets of a patient's life. In addition to individual interventions, healthcare providers must consider the entire family unit and the wider community. In summary, child and adolescent refugees comprise a vulnerable population with unique mental health needs, requiring careful and thoughtful consideration.

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