Family-based mental health interventions for refugees across the migration continuum: A systematic review

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ARTICLE INFO

Keywords: Refugees Implementation Mental health services Humanitarian emergencies LMIC Resettlement Literature review

ABSTRACT

This study reviewed the literature on family-based mental health interventions for refugees across migration contexts and settings to identify types of interventions and intervention components, implementation approaches and to assess effectiveness. The review used a systematic approach, and ten intervention studies were retained for analysis. The findings identified three primary types of family-based mental health interventions used with diverse refugee communities in settings in the Global North and South-parenting groups, multiple family groups and home visiting interventions. Findings indicated that non-specialized or peer providers were frequently utilized to deliver the interventions though additional details on the workforce and workforce development strategies are needed to better understand how to sustain and support such providers. The findings suggest that family-based mental health interventions are potentially effective for improving a range of child and caregiver mental health outcomes and improving family processes and functioning among refugee families. However, the empirical evidence is quite limited to date, with a need for additional rigorous studies, especially with refugee families in humanitarian settings, to further build the evidence base.

1. Introduction

The global refugee population has doubled in the last decade and there are currently more than 26 million refugees worldwide (UNHCR, 2019). Approximately 25% of the total refugee population are part of the global diaspora resulting from the 10-year Syrian war. More than half of the world’s refugees remain displaced in dense urban areas or refugee camps in the Global South (UNHCR, n.d.a,b). A smaller percentage are permanently resettled to countries in the Global North including the U.S which has historically been a top destination for refugees (Migration Policy Institute, 2019). Though the number of new arrivals to the U.S dropped in recent years, the numbers of refugees admitted to the U.S. are increasing, as evidenced by the recent Afghan resettlement and anticipated as a result of the war in Ukraine (Center for Immigration Studies, n.d.).

Refugees are at high risk for common mental disorders due to violence and trauma experienced in the country of origin, during migration and compounded by displacement and/or resettlement stressors. Several systematic reviews have identified high rates of depression, anxiety and PTSD among refugee adults and children in humanitarian settings and in resettlement contexts (Bogic et al., 2015; Bronstein & Montgomery, 2011; Kien et al., 2018; Nesterko et al., 2020). In addition to trauma associated with armed conflict, forced migration introduces multiple stressors that can exacerbate mental health problems including family separation, limited livelihood opportunities, precarious access to public services and uncertainty about the future (Li et al., 2016; Miller & Rasmussen, 2010, 2014; Hou et al., 2020). In recent years, COVID-19 has increased challenges for refugee families triggered by economic hardship, disruption to schooling, social isolation and rising xenophobia (Júnior et al., 2020).

These experiences impact relationships within families, changing family roles and parent-child relationships and potentially increasing interpersonal conflict and discord (Bogic et al., 2015; Kien et al., 2018; Sim et al., 2018; Weine et al., 2004). For refugee families in humanitarian...
settings, mental health and family functioning may be adversely impacted by insecure living conditions and continuous exposure to adversity in the form of limited ability to work, precarious legal status and insecurity about their family’s future (Silove et al., 2017). In resettlement, families face new and challenging conditions associated with adjustment and acculturation to a new country, language, school and legal system (d’Abreu et al., 2019). These experiences and conditions put strain on the family system as family roles are renegotiated and traditional family structures are transformed by the demands of their new living circumstances.

The resulting strain on vital family relationships and extended kin networks is associated with increased social isolation and stress, compounding risks for mental health outcomes (Morina et al., 2016; Silove, 2013). Furthermore, there is a growing body of literature examining the bidirectional influence that trauma can have on the psychosocial health of other family members, as well as intergenerational impacts that can persist long after the events have occurred (Flanagan et al., 2020). A systematic review by Sancangal & Yung (2017) found that refugee children of parents with significant trauma histories reported higher rates of common mental disorders compared to children whose parents did not report significant trauma. Moreover, they found that child mistreatment, low parental engagement and poor family communication and silence about war-related experiences functioned as key mechanisms by which this transmission of trauma occurred. Other work in this area has examined underlying biological, cultural and economic mechanisms that may account for negative mental outcomes in children of war survivors that can persist into adulthood (Devakumar et al., 2014).

Yet, the family is also a primary mechanism of support and coping with stressors and adversity, including the difficulties associated with displacement and resettlement for refugee families (Figley & Figley, 2009; Sloan & Shoshoni, 2017; Xiong et al., 2021). Family also conveys and nurtures a sense of identity and cultural heritage (Rabiau, 2019), a particularly important anchor in the context of uprooting from one’s home and social context (Walsh, 2015). Research also indicates that the family unit is also critical in the process of creating meaning of migration-related experiences and adversity. Among Iraqi families in resettlement, for example, this occurred by developing a sense of shared losses, strengthening family closeness and reconstructing a sense of the family’s future and legacy in resettlement (Gangamma, 2018). For Kurdish refugees, the act of recreating cultural practices in resettlement helped families ease the pain of migration-related losses by strengthening their collective Kurdish identity and restoring hope for the future (Kever et al., 2017).

Given the family-level vulnerabilities associated with war and forced migration and the protective role that the family plays in coping with the myriad effects of trauma and forced migration, there is an important role for family systems approaches with refugees (Patterson et al., 2018). Indeed, family-level mental health interventions are a useful and psychological and/or social intervention that includes several family members in therapy and not just the traumatized individual. Studies suggested a positive impact on individual and family functioning, PTSD symptoms and mental health utilization. However, similar to other reviews which have a stated focus on families, in practice, the extent of family involvement varied considerably across included studies and often did not include either caregiver at all (Bennouna et al., 2019). Moreover, only two included studies used a two-generational approach and examined family level outcomes, with the majority of studies only examining child level outcomes.

Specific to research conducted in the Global South, reviews have found family-based mental health interventions to be promising for improving youth mental health and well-being, parenting behaviors, and family functioning (Pedersen et al., 2019) and feasible and acceptable when delivered by non-specialist providers (Healy et al., 2018). However, these reviews focus on families living in Global South or who are impacted by internal displacement (Gillespie et al., 2022) and did not include a focus on refugee families whose experiences, needs and family level concerns are distinct from other families. Moreover, existing reviews have primarily focused on assessing the effectiveness of interventions, with limited focus on examining the types of interventions that are delivered to refugee families and implementation approaches and outcomes. This information is important as it can inform the development and implementation of future family-based mental health services, including relevant models for Global North and South settings, selection and training of providers and anticipating implementation challenges and opportunities.

In response to these observed gaps in the literature, the aim of this review was to synthesize the available data on family-based mental health interventions for refugee families living in settings in the Global North and South. Consistent with others (Slobodin & de Jong, 2015; Pedersen et al., 2019), we defined a family intervention as a social or psychological intervention that had a goal of improving the mental health or psychosocial wellbeing of family members (not only individual members) and improving the overall family context or functioning. Different from existing definitions, we further specified a family intervention as one that utilizes a two or more generational approach to assessing mental health and psychosocial outcomes and/or includes a family level outcome. In doing so, we intended to summarize the types of family interventions used with refugee families across the migration continuum (e.g., in humanitarian settings, Global South and resettlement contexts in the Global North), characteristics concerning intervention delivery, intervention components and the current state of evidence for such interventions.

2. Methods

Systematic reviews synthesize the available evidence to uncover the state of knowledge in a given area and/or the effects of interventions. We followed the Cochrane Guidelines (Higgins et al., 2022) for conducting reviews of interventions which includes (a) a priori research questions; (b) detailed inclusion criteria including intervention, population, context and outcomes of interest; (c) identifying relevant studies; (d) selecting eligible studies; (e) formal process of data extraction and (f) summary and synthesis of findings.

Our review was guided by the following research questions:

1) What types of family-based mental health interventions have been used with refugees and what do these interventions consist of?
2) Where and with whom are family-based mental health interventions used?
3) What approaches are used to implement family-based mental health interventions such as types of providers, training and supervision?
4) How effective are family-based interventions in addressing mental health, family level and other priority outcomes and what implementation challenges are encountered in delivering such interventions?

1.1. Existing literature on family-based mental health interventions

Despite growing attention to the need for family-based mental health approaches with refugees, there is limited empirical evidence specific to refugee families in the Global South or in resettlement contexts. Slobodin and de Jong (2015) conducted the most thorough review of family interventions for refugees to date. They defined a family intervention as a psychological and/or social intervention that includes several family members in therapy and not just the traumatized individual. Studies...
To identify relevant studies for our review, we followed the Cochrane guidelines (Furlan et al., 2009). We conducted a search for evidence in the following databases: PubMed (includes MEDLINE), Embase.com, CINAHL Plus with Full Text (EBSCOhost), and APA PsycINFO (ProQuest) which were chosen in consultation with the fourth author who is a research librarian for their extensive coverage of the research topic. We developed a search strategy around the three conceptual domains of: (1) forced migrants, (2) family-based, and (3) interventions, deriving terms from the existing literature and collective knowledge of the authors. Both controlled vocabulary terms and keywords were used to describe each of these domains. Searches were conducted by the research librarian (R.H) in August 2020. No restrictions were placed on date or language of search results. Backwards and forwards citation searching were conducted on all included studies. Full search strategies for all databases are included in Appendix A.

2.1. Inclusion and exclusion criteria

Only peer-reviewed articles accessible in English were included. Prior to undertaking the systematic review, the authors conducted an initial scoping search of the literature on family interventions for refugees, and preliminary findings indicated that there were few well-powered randomized controlled trials of family-based interventions for refugees. To better capture the current state of evidence, therefore, eligible study designs could include randomized controlled trial (RCTs), quasi-experimental, and pre-post studies. We included studies of family-based mental health interventions including prevention and treatment interventions that: (a) were intended for refugees as defined by the UNHCR, (b) took place in the context of resettlement in a high income country (HIC) or humanitarian setting or urban area in a low and middle income country (LMIC), (c) included family level objectives as described in the study aims or intervention description, and (d) took a two or more generational approach to mental health and psychosocial outcomes or only examined child or caregiver mental health outcomes but included a family level outcome. We did not include qualitative or case studies of family-based mental health interventions. Further, studies were excluded that: (a) did not explicitly include refugee populations, (b) did not take a two or more generational approach to mental health outcomes or did not include a family level outcome.

For this review, we used the UN definition which defines a refugee as a person who is unwilling or unable to return to his or her country of origin because of persecution or a well-founded fear of persecution based on race, religion, nationality, or membership in a particular social group or political opinions (UNCHR, n.d.). We defined a two or more generational approach as one that examined both adult (caregiver and/or grandparents) and child outcomes and we conceptualized mental health outcomes broadly including clinical symptoms as well as psychosocial concerns common among refugee communities.

A supplemental targeted search and review was done by team members to ensure that articles referenced in relevant review papers (Wieling, 2018; Gillespie et al., 2022) were not overlooked. Two additional studies met inclusion criteria and were added for a total sample of 10 articles. Fig. 1 presents the results from the search at each stage.

2.2. Data analysis

To analyze the studies, we developed a standardized data extraction tool based on our preliminary scoping of the literature to track information about study characteristics (aims, study design, sample, comparison group, location, context), interventions and intervention characteristics (description, components, duration, format) and mental health and psychosocial outcomes (adult, child, family). Characteristics relating to intervention delivery were also tracked including intervention type, background, training, and supervision, as well as implementation experiences, challenges and outcomes. The data extraction tool was pilot tested with an initial set of articles, refined and finalized through discussion among the authors.

Data were extracted verbatim. To analyze the data, we used tabulation and summative content analysis techniques (Hsieh & Shannon, 2005) and conventional content analysis techniques to inductively analyze narrative text (Elo & Kyngäs, 2008). We conducted descriptive analyses to examine where, with whom and for what populations family-based mental health interventions were used. To analyze intervention types, we conducted an in-depth examination of all available information on interventions and categorized them into components drawing on common treatment element typologies (Chorpita et al., 2005, 2007). Our
examination of training and supervision approaches focused on those reported in the description of the intervention, findings and discussion. Finally, to examine the effectiveness of family-based interventions, we analyzed the mental health and psychosocial outcomes under investigation as reported in the findings and clustered the data based on family intervention type. Given the heterogeneity in outcome measures, we conducted a narrative summary of findings.

To assess risk of bias, we used Cochrane ROB 2 for randomized trials (Sterne et al., 2019) and the ROBINS-i tool for non-randomized studies (Sterne et al., 2016).

3. Results

Table 1 provides an overview of the 10 studies included in the final analysis.

3.1. Search results

Database searches yielded 14,092 references. After removing 4178 duplicates, 9914 results remained for title and abstract screening. Citations were split among four of the authors to determine whether each article met inclusion criteria based upon its title and abstract. Title and abstract review resulted in the exclusion of 9592 articles in accordance with our eligibility criteria. To ensure the systematic application of inclusion criteria, the second author conducted a second review of the remaining 322 abstracts. An additional 116 were removed because they did not meet eligibility criteria. The 206 remaining articles were once again divided among the four authors. The authors reviewed the full-text articles for inclusion. Any uncertainty regarding retention decisions based on inclusion and exclusion criteria were discussed and resolved during weekly meetings. The full-text review process resulted in the exclusion of 198 of the 206 articles due to non-relevance to intervention focus or approach, population, or study design, resulting in a total of 8 articles.

3.2. Study characteristics

Final articles included four RCTs and six non-randomized studies including two quasi-experimental and four pre-post design studies. These were conducted in humanitarian contexts in the Middle East including Turkey (10%), Lebanon (20%), and Jordan (10%), and in resettlement contexts in the United States (40%), Canada (10%), and Australia (10%). Interventions targeted refugees from Syria (n=3, 30%), Palestine (n=2, 20%), Sudan and Zimbabwe (n=1, 10%), Burma (n=1, 10%), Bhutan and Somalia (n=1–10%), Kosovo (n=1–10%), Bosnia and Herzegovina (n=1–10%), as well as Burundi, Liberia, Sierra Leone, and the Democratic Republic of Congo (n=1, 10%). Over half of the interventions were primarily intended for parents only (n=6, 60%), and the other 40% focused on family units which included at least one caregiver and a child (n=4). Children participating in the studies ranged in age from 4 months old to 17 years old. Interventions were delivered in diverse locations including community centers (n=7, 70%), schools (n=2, 20%) and the home (n=3, 30%) and some interventions were delivered in multiple settings (see for example Ponguta et al., 2020 and Lakkis et al., 2020)

3.3. Intervention types and components

Drawing on available descriptions, we categorized the family interventions into three primary types: (1) parenting interventions; (2) multiple family groups; and (3) home visiting interventions. See Table 3.

3.4. Parenting interventions

Parenting interventions were among the most common interventions detected across included studies (n=6, 60%). In all cases, these interventions were delivered in a group setting, often in community-based organizations to caregivers with the purpose of promoting child development and mitigating risk of child mental health problems by strengthening the family context through parenting skills development. This was primarily accomplished through discussion of topics relevant to child development, child behavior and/or family functioning in the context of trauma and/or resettlement and through the facilitation of positive parenting skills that aimed to enhance parent-child relationships and reduce challenging behavior. Of these interventions, three (30%) were specifically focused on parenting topics and concerns in early childhood (Lakkis et al., 2020; Ponguta et al., 2020; Stewart et al., 2015). Two of the studies organized separate parenting groups for women and men (Renzaho & Vignjevic, 2011; Stewart et al., 2015) whereas Miller et al. (2020) included both male and female caregivers in their parenting group as a way of overcoming common challenges related to father engagement.

We detected nine different components across parenting interventions, with the acquisition of positive parenting (also referred to as responsive caregiving skills, see Tables 2 and 3) being the most common of these, included in all six of the studies. This included developing responsive caregiving techniques such as listening and communicating effectively, skills to assist with child emotion regulation, reducing harsh punishment and reinforcement of positive behaviors. Other components included anxiety and stress self-management strategies for alleviating distress among caregivers (e.g., mindfulness exercises, breathing

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**Table 1**

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Location</th>
<th>Population</th>
<th>Study Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballard et al.</td>
<td>2018</td>
<td>Urban city in Midwest, USA (R)</td>
<td>Karen refugees from Burma (n=11 caregivers, n=11 children)</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Betancourt et al.</td>
<td>2020</td>
<td>Greater Boston &amp; Springfield, MA, USA (R)</td>
<td>40 Bhutanese families (n=62 caregivers, n=49 children) &amp; 40 Somali Bantu families (n=43 caregivers, n=103 children)</td>
<td>RCT</td>
</tr>
<tr>
<td>El-Khani et al.</td>
<td>2018</td>
<td>Reyhanli, Syria-Turkey border town in Turkey (H)</td>
<td>14 Syrian families (n=14 caregivers, n=16 children)</td>
<td>Pre-post</td>
</tr>
<tr>
<td>Lakkis et al.</td>
<td>2020</td>
<td>Bourj el-Brajneh, Shatila, Lebanon; Amman, Jordan (H)</td>
<td>Syrian &amp; Palestinian caregivers (n=125)</td>
<td>Pre-post</td>
</tr>
<tr>
<td>Miller et al.</td>
<td>2020</td>
<td>Tripoli, northern Lebanon (H)</td>
<td>Syrian (n=131), Palestinian (n=15), &amp; Lebanese (n=5) caregivers</td>
<td>RCT</td>
</tr>
<tr>
<td>Ponguta et al.</td>
<td>2020</td>
<td>Beirut, Lebanon (H)</td>
<td>Palestinian refugees &amp; low-income Lebanese families (n=106 caregivers)</td>
<td>RCT</td>
</tr>
<tr>
<td>Renzaho &amp; Vignjevic</td>
<td>2011</td>
<td>Melbourne, Australia (R)</td>
<td>Congolese (n=19), Burundian (n=11), &amp; Sierra Leonean/Libian (n=9) caregivers</td>
<td>Pre-post</td>
</tr>
<tr>
<td>Stewart et al.</td>
<td>2015</td>
<td>Edmonton, Alberta &amp; Ottawa, Ontario, Canada (R)</td>
<td>Sudanese (n=48) &amp; Zimbabwean (n=37) caregivers</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Weine et al.</td>
<td>2003</td>
<td>Chicago, IL (R)</td>
<td>Kosovar families (n=42)</td>
<td>Pre-post</td>
</tr>
<tr>
<td>Weine et al.</td>
<td>2008</td>
<td>Chicago, IL (R)</td>
<td>Bosnian &amp; Herzegovinian families (n=197)</td>
<td>RCT</td>
</tr>
</tbody>
</table>

Note: (R), resettlement context; (H), humanitarian context.
Table 2 (continued)

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource navigation</td>
<td>social networks and connections in displacement and resettlement.</td>
</tr>
<tr>
<td></td>
<td>Sharing information about available services and resources and improving understanding about how to access, seek care and link to resources.</td>
</tr>
</tbody>
</table>

Multiple family groups were used in three of the studies (30%). These interventions consisted of family members from multiple families who were experiencing similar culturally mediated family stressors such as trauma survival, displacement, and/or resettlement. Two of the studies focused on members of the family over the age of 17 years (Weine et al., 2003, 2008) whereas the study by El-Khani et al. (2018) used co-occurring, separate groups for adults and children (8 years and older). The multiple family groups were characterized as indicated prevention interventions, targeting families with at least one member who met criteria for PTSD. These interventions were delivered in community and school settings and often focused on inter-familial discussion of stressors affecting family relationships; development of strategies and coping to improve family functioning and identification of family strengths.

Eleven different components were identified in the multiple family group interventions. All three MFG studies incorporated psycho-education on the impact of trauma and stress on individuals and families, family communication skills, family goal setting and social skills training including rebuilding social support in resettlement or displacement and leveraging the group setting and relationships with other parents in the group to enhance social networks. The studies by Weine et al. (2003, 2008) with Bosnian and Kosovar refugee families also included the development of a strengths-oriented family narrative and components focused on identifying and activating family strengths to increase family functioning and promote access to mental health services and resource navigation. The multiple family group tested by El-Khani et al. (2018) also included caregiver anxiety and stress self-management skill building, acquisition of positive parenting skills and ensuring child safety even with security issues in humanitarian emergencies.

3.6. Home visiting interventions

We defined a home visiting intervention as those that include adult and child members of a singular family unit who receive services and support in the home setting to address family-related concerns stemming from trauma and resettlement-related experiences. The study by Betancourt et al. (2020) was the only intervention to be fully delivered in the home. However, two other parenting interventions also integrated home visits into their parenting intervention to support acquisition and utilization of new parenting skills in context (Lakkis et al., 2020; Ponguta et al., 2020). The Betancourt et al. (2020) study used a universal techniques and grounding skills, n=3, increasing knowledge about adjustment and acculturation related issues (e.g., school systems and laws pertinent to families, n=3), child development topics (e.g., peers, parenting adolescents and early childhood topics, n=3), family communication strategies (e.g., conflict resolution and problems solving, n=3), psychoeducation (e.g., impact of trauma and displacement on children and family systems, n=2), social skills training (e.g., forming relationships in displacement, navigating informal and formal support, n=2) and family roles and identity (e.g., maternal role within the family system, n=1). For example, the Caregiver Support Intervention described by Miller et al. (2020) aimed to improve wellbeing and lower stress among Syrian parents in Lebanon by using mindfulness, relaxation and anger management strategies. Through their intervention, they also aimed to increase knowledge of positive parenting techniques.

3.5. Multiple family groups

Multiple family groups were used in three of the studies (30%). These interventions consisted of family members from multiple families who were experiencing similar culturally mediated family stressors such as trauma survival, displacement, and/or resettlement. Two of the studies focused on members of the family over the age of 17 years (Weine et al., 2003, 2008) whereas the study by El-Khani et al. (2018) used co-occurring, separate groups for adults and children (8 years and older). The multiple family groups were characterized as indicated prevention interventions, targeting families with at least one member who met criteria for PTSD. These interventions were delivered in community and school settings and often focused on inter-familial discussion of stressors affecting family relationships; development of strategies and coping to improve family functioning and identification of family strengths.

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Prevention home visiting model to reduce risks of child mental health problems and increase family functioning. No clinical diagnosis was required to participate in the intervention. The intervention included ten different components including the development of a family narrative, identification of family strengths, family goal setting, caregiver and child self-management strategies to reduce stress and the effects of trauma (such as mindfulness), behavior activation, psychoeducation on trauma and resettlement, education on adjustment and acculturation issues, positive parenting skills, family communication strategies, social skills training including strengthening navigation of formal and informal networks.

### 3.7. Delivery: providers, training, and supervision

Seven studies (70%) utilized lay community members to deliver the program intervention. Five of these studies explicitly identified lay community members as sharing a common background and language with study participants. They were referred to variously as parenting educators (Renzaho & Vignjevic, 2011), immigrant facilitators (Weine et al., 2003, 2008), peer mentors (Stewart et al., 2015), and interventionists “from the refugee community” (Betancourt et al., 2020). In their interventions, Betancourt et al. (2020) and El-Khani et al. (2018) also required community members to have prior experience in providing health, education, or social services. Of the seven studies involving community members in program delivery, two interventions (Renzaho &

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### Table 3

<table>
<thead>
<tr>
<th>Author</th>
<th>Name of Intervention</th>
<th>Type</th>
<th>Setting</th>
<th>Duration</th>
<th>Intervention Components</th>
<th>Provider</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballard et al.</td>
<td>Enhancing Family Connection</td>
<td>PG</td>
<td>School</td>
<td>10 consecutive weekly sessions lasting 90 min</td>
<td>Family problem solving, Positive parenting skills, Psychoeducation – child &amp; parent</td>
<td>External expert</td>
<td>Primary research team member</td>
</tr>
<tr>
<td>Lakkis et al.</td>
<td>SANAD</td>
<td>PG</td>
<td>Community</td>
<td>21 consecutive weekly sessions lasting 120–180 min</td>
<td>Anxiety &amp; stress management, Education on adjustment &amp; acculturation issues, Education on child development, Family communication skills, Positive parenting skills</td>
<td>External expert</td>
<td>Licensed professional</td>
</tr>
<tr>
<td>Miller et al.</td>
<td>War Child Holland's Caregiver Support Intervention (CSI) MOCOP (Mother-Child Education Program)</td>
<td>PG</td>
<td>Community</td>
<td>9 consecutive weekly sessions</td>
<td>Anxiety &amp; stress management, Positive parenting skills, Psychoeducation – child &amp; parent</td>
<td>Lay community member</td>
<td>Primary research team member &amp; licensed professional</td>
</tr>
<tr>
<td>Ponguta et al.</td>
<td>African Migrant Parenting Program</td>
<td>PG + HV</td>
<td>Community + Home</td>
<td>25 sessions lasting 180 min</td>
<td>Education on child development, Family roles &amp; identity, Positive parenting skills</td>
<td>External expert</td>
<td>Licensed professional</td>
</tr>
<tr>
<td>Renzano &amp; Vignjevic</td>
<td>“I Am Not Alone”</td>
<td>PG</td>
<td>Community</td>
<td>7 months of bi-weekly sessions lasting 60–120 min</td>
<td>Education on adjustment &amp; acculturation issues, Positive parenting skills, Social skills training</td>
<td>Lay community member &amp; external mediator</td>
<td>Expert Multidisciplinary committee</td>
</tr>
<tr>
<td>El-Khani et al.</td>
<td>Teaching Recovery Technique (TRT)</td>
<td>MFG</td>
<td>School</td>
<td>5 consecutive weekly sessions lasting 120 min</td>
<td>Anxiety &amp; stress management, Family communication skills, Family goal setting, Positive parenting skills, Psychoeducation – child &amp; parent, Social skills training</td>
<td>Community member with HES background</td>
<td>Primary research team member</td>
</tr>
<tr>
<td>Weine et al. (2003)</td>
<td>Tea and Families Education and Support (TAFES)</td>
<td>MFG</td>
<td>Community</td>
<td>6 sessions over 8 weeks</td>
<td>Family communication skills, Family goal setting, Family narrative, Family problem solving, Family roles &amp; identity, Identification &amp; activation of family strengths, Psychoeducation – child &amp; parent, Social skills training</td>
<td>Lay community member</td>
<td>Primary research team member</td>
</tr>
<tr>
<td>Weine et al. (2008)</td>
<td>Coffee and Families Education and Support (CAFES)</td>
<td>MFG</td>
<td>Community</td>
<td>16 consecutive weekly sessions lasting 75 min</td>
<td>Family communication skills, Family goal setting, Family narrative, Family problem solving, Family roles &amp; identity, Identification &amp; activation of family strengths, Psychoeducation – child &amp; parent, Social skills training, Resource navigation</td>
<td>Lay community member</td>
<td>Primary research team member</td>
</tr>
<tr>
<td>Home Visiting</td>
<td>Family Strengthening Intervention for Refugees (FSI-R)</td>
<td>HV</td>
<td>Home</td>
<td>10 consecutive weekly sessions lasting 90 min</td>
<td>Anxiety &amp; stress management, Behavior activation, Education on adjustment &amp; acculturation issues, Family communication skills, Family goal setting, Family narrative, Identification &amp; activation of family strengths, Positive parenting skills, Psychoeducation – child &amp; parent, Social skills training</td>
<td>Community member with HES background</td>
<td>Multidisciplinary committee &amp; licensed professional</td>
</tr>
</tbody>
</table>

Note: PG, Parenting Group; HV, Home Visits; MFG, Multi-Family Group; N/A, not answered; HES, Health, Education, or Social Services; * indicates article contained info about provider training.

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...
Vignjevic, 2011; Stewart et al., 2015) were co-facilitated by external experts. For example, in the study by Stewart et al. (2015), Zimbabwean and Sudanese peer mentors led sessions alongside Canadian professionals experienced in working with refugee and immigrant populations (Stewart et al., 2015). These external experts had a background in mental health or counseling, or were professional health, education, or social service providers for immigrants and refugees. External experts were the sole providers in three (30%) studies (Ballard et al., 2017; Lakkis et al., 2020; Ponguta et al., 2020).

Only half of the articles (n=5) had clear information about the training providers received prior to delivering each intervention. This included either trained conducted by the research team (n=2; Weine et al., 2003; Weine et al., 2008) or participation in an established training program instructed by a trainer specialized in the intervention model (n=3; Ballard et al., 2017; El-Khani et al., 2018; Ponguta et al., 2020). For example, local school teachers chosen as providers for the Teaching Recovery Techniques (TRT) intervention were trained by a certified TRT trainer (El-Khani et al., 2018). Duration of training was reported for six studies and ranged from one single-day session to a ten-day program.

Four studies (40%) provided information about the content covered in provider training, namely instruction on the delivery of intervention content. In their peer led parenting intervention for Zimbabwean and Sudanese parents, Stewart et al. (2015) first educated providers on needs assessment results and clarified intervention objectives. Training focused on introducing providers to their new mentor roles, support group topics, session reporting methods, and the survey instrument. In their training sessions, Weine et al. (2003, 2008) covered additional topics important for working with Bosnian and Kosovar refugees, such as information on sensitive topics like family trauma, communication, psychoeducation, and ethnocultural issues, and supplemented trainees understanding using demonstrations, role plays, and practice exercises or sessions. Ponguta et al. (2020) also aimed to strengthen providers’ group-facilitation skills.

All but one study (n=9, 90%) reported some form of provider supervision. Most commonly, this was done by a member of the primary research team (n=5, 56%). There were also instances where trained or licensed professionals not part of the primary research team (n=3; Betancourt et al., 2019; Lakkis et al., 2020; Ponguta et al., 2020) or a multidisciplinary team or committee (n=1; Stewart et al., 2015) served as the main source of supervision. In two cases, providers were supervised by more than one source (Betancourt et al., 2020; Miller et al., 2020). For example, in the Miller et al. (2020) study, guidance was provided by both a trained social worker who was under direct supervision from the PI and by a local Lebanese psychologist. Betancourt et al. (2020) incorporated multiple supervisors including licensed clinical social workers, a child psychiatrist, a Master’s level program manager, and a multidisciplinary clinical and research team. Providers were supervised in-person and/or virtually via meetings or video recordings. The sessions focused on feedback, support, and troubleshooting (n=4), as well as assessing model fidelity (n=4). One study (Ponguta et al., 2020), assessed program fidelity through observation of 10% of sessions (approximately 2.5 sessions). In the majority of interventions (n=6, 60%), providers were supervised at least once a week, and half of these (n=3, 30%) also included various other weekly and/or monthly supervision sessions.

3.8. Primary outcomes under investigation

In seven of the ten studies, the most common outcomes were parenting practices or disciplinary style (n=7, 70%). Common mental health disorders, defined as anxiety, depression, stress, and PTSD, were the most frequently identified mental health outcomes for parents (n=5, 55%) and children (n=3, 34%). Other adult outcomes that were investigated included strengths and difficulties (n=2, 22%, e.g. Ballard et al., 2017; El-Khani et al., 2018) and psychosocial wellbeing (n=2, 22%, e.g. Betancourt et al., 2019; Miller et al., 2020). Table 4 provides a summary of the outcomes investigated in each study.

<table>
<thead>
<tr>
<th>Author Comparison</th>
<th>Primary Outcomes</th>
<th>Findings Parenting Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballard et al. None</td>
<td>Adult: Mental health (depression, anxiety, PTSD, somatic concerns, relationship stress); Drug use</td>
<td>Adult: Significant increase in parental mental health problems, especially PTSD</td>
</tr>
<tr>
<td></td>
<td>Child: Strengths and difficulties; PTSD; Depression</td>
<td>Child: Significant decrease in children's depression symptoms and emotional problems</td>
</tr>
<tr>
<td></td>
<td>Family: Parental bonding; Parent/youth issues; Parental conflict/ discipline</td>
<td>Family: No quantitative findings reported</td>
</tr>
<tr>
<td>Lakkis et al. None</td>
<td>Family: Parenting; Parenting stress; Disciplinary style</td>
<td>Family: improvement in parenting, parenting stress, disciplinary style</td>
</tr>
<tr>
<td>Miller et al. WLC</td>
<td>Adult: Stress; Psychosocial wellbeing; Psychological distress; Stress management</td>
<td>Adult: Significant improvement in all parent-reported outcomes in the intervention group</td>
</tr>
<tr>
<td></td>
<td>Child: Psychosocial wellbeing</td>
<td>Child: No significant increase in psychosocial wellbeing of children whose parents were in the intervention group</td>
</tr>
<tr>
<td>Ponguta et al. WLC</td>
<td>Child: Strengths and difficulties</td>
<td>Child: No significant improvement in children's behavioral and emotional difficulties</td>
</tr>
<tr>
<td></td>
<td>Family: Disciplinary style; Parenting knowledge and practices</td>
<td>Family: decrease in harsh disciplinary practices of mothers in intervention group</td>
</tr>
<tr>
<td>Renzaho &amp; Vignjevic None</td>
<td>Family: Parenting attitudes and child-rearing practices</td>
<td>Family: Significant improvement in parental expectations, parental empathy towards children needs, awareness and knowledge of alternatives to corporal punishment, and parent-child family roles; No change on the restriction of children's power and independence dimension</td>
</tr>
<tr>
<td>Stewart et al None</td>
<td>Adult: Support needs; Loneliness and isolation; Coping</td>
<td>Adult: No statistically significant improvement in loneliness and coping</td>
</tr>
<tr>
<td></td>
<td>Family: Parenting stress</td>
<td>Family: No significant improvement in parenting stress</td>
</tr>
<tr>
<td>Multi-Family Groups</td>
<td>Adult: Anxiety; Strengths and Difficulties; Stress and Trauma; Mental Health (depression, anxiety, stress)</td>
<td>Adult: No decrease in parental mental health</td>
</tr>
<tr>
<td>El-Khani et al. None</td>
<td>Child: Behavioral Problems; PTSD; Depression; Anxiety</td>
<td>Child: Significant decrease in child behavioral problems and children's PTSD</td>
</tr>
</tbody>
</table>

(continued on next page)
There were a broad range of outcomes assessed across the parenting intervention studies. Two parenting interventions using randomized control pilot trials provided the most promising evidence for improving positive parenting practices (Miller et al., 2020; Ponguta et al., 2020), and one for improving caregiver wellbeing (Miller et al., 2020). The pilot RCT studies involving Syrian refugees resettled in Lebanon found significant changes in all parent-reported outcomes (caregiver stress, psychosocial wellbeing, psychological distress, and parenting) in the intervention group, with no significant changes on any variable in the waitlist control group (Miller et al., 2020). The other RCT of Palestinian refugees resettled in Lebanon showed favorable results, with mothers in the intervention group having a reduction in harsh disciplinary styles compared to the control group (Ponguta et al., 2020).

Findings from the non-randomized studies were tentatively favorable for improving parenting practices and disciplinary style and mental health and psychosocial outcomes. Two pre-post design parenting interventions observed improvements in parenting practice and disciplinary style (Lakkis et al., 2020; Renzaho and Vignjevic, 2011). Lakkis et al. (2020) found significant improvements in parental disciplinary style in the areas of ignoring, shaming, and physical punishment. Another study measured changes in parenting attitudes and child-rearing practices, particularly for adolescents and found significantly higher scores at follow-up in the areas of parental expectations, parental empathy towards children's needs, and parent-child family roles (Renzaho and Vignjevic, 2011).

In terms of mental health and psychosocial outcomes, one quasi-experimental study that collected data from 10 Karen refugees resettled from Burma found that on structured assessments, parents reported increased mental health problems but children's depression symptoms decreased (Ballard et al., 2017). The other quasi-experimental study of Zimbabwean and Sudanese refugees did not have strong findings, with a Wilcoxon signed-rank test showing that perceived loneliness, support-seeking scores, and decreased parenting stress were not statistically significant (Stewart et al., 2015).

3.10. Multiple family group interventions

Results from the multiple family group studies were strongest in terms of increasing family comfort in talking about mental health and access and engagement with MH services among Bosnian refugees (Weine et al., 2008). The potential effectiveness of MFGs in areas of parenting skills is tentative. Results from a small pre-post design with Syrian mothers and children indicated improvements in areas of parental laxness, parental overreactivity, and parental efficacy (El-Khani et al., 2018). There is some evidence to support impact on child or adult mental health. Two of the three multiple family group interventions (67%) found favorable outcomes in social support, parental mental health service utilization and increased knowledge and attitudes regarding mental health trauma (Weine et al., 2003; Weine et al., 2008) as well as decreased child behavioral problems (El-Khani et al., 2018).

3.11. Home visiting interventions

Home visiting interventions are potentially effective in improving mental health of children and family functioning. Results from a pilot randomized-controlled trial with Bhutanese and Somali Bantu refugee families indicated significant decreases in children's mental health problems, indicated by lower traumatic stress reactions and improvements in child depression symptoms and child conduct problems among children in both communities in the intervention group versus the care-as-usual group (Betancourt et al., 2020). However, caregivers did not report significant improvements in mental health or parenting outcomes compared to care-as-usual caregivers (Betancourt et al., 2020).

3.12. Implementation outcomes: feasibility and acceptability

Seven of the ten studies assessed implementation outcomes including feasibility of recruitment for staff and participants, feasibility of engaging and retaining participants and completing the intervention, acceptability of interventions, and intervention fidelity. Overall, studies found interventions to be feasible and acceptable to refugee families, however, there were some challenges observed. Only three of the ten studies (30%) reported on the feasibility of recruitment. One study examined the feasibility of recruiting participants and found that recruiting families with both caregivers willing to participate was feasible (Miller et al., 2020), whereas the other study found that when fathers were invited to

### Table 4 (continued)

<table>
<thead>
<tr>
<th>Author</th>
<th>Comparison</th>
<th>Primary Outcomes</th>
<th>Findings Parenting Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betancourt et al.</td>
<td>CAU</td>
<td>Adult: Psychosocial functioning; PTSD; Anxiety; Depression</td>
<td>Child: Psychosocial functioning; Depression; Anxiety; Sociodiscursive impairment; PTSD; Child conduct problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adult: No significant decrease in caregiver mental health problems compared to CAU caregivers.</td>
<td>Child: Significant decrease in traumatic stress reactions, depression symptoms, and child conduct problems compared to CAU children.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family: Family functioning; Family conflict; Intergenerational congruence; Parenting practices</td>
<td>Family: Significant decrease in family arguing compared to CAU children; No significant improvements in caregiver-child relationships or healthy parenting outcomes compared to CAU caregivers and children.</td>
</tr>
<tr>
<td>Note: CAU, Care as usual; WLC, Waist list control.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Four of the studies were randomized trials including three randomized pilot trials and one well powered randomized control trial. The remaining six studies used non-randomized designs with small sample sizes and no comparison group. For the randomized trials, the overall risk of bias was assessed as low (four studies). The majority of the non-randomized studies (four of six studies) did not provide sufficient information to fully assess the risk of bias (see appendix Table B2). Thus, cautious conclusions should be drawn from the reported findings from these studies.
participate, only the mothers and children took part in the study (El-Khani et al., 2018).

In addition to the feasibility of recruiting participants, El Khani et al. (2018) also examined the feasibility of recruiting and training local non-specialist intervention facilitators and found that it was feasible to recruit and train teachers to run a parenting program with a clear manual, support staff, and continuous communication throughout the intervention (El Khani et al., 2018).

Seven of the ten studies looked at the feasibility of engaging, retaining, and completing the intervention among participants (Ballard et al., 2017; Betancourt et al., 2020; El Khani et al., 2018; Miller et al., 2020; Ponguta, 2019; Stewart et al., 2015; Wein et al., 2003). Most studies found high rates of engagement and retention. One study had high participant engagement, with more than 80% of participants having attended seven of the nine sessions (Ballard et al., 2017). However, other studies had higher rates of attrition (68% of women and 57% of men in Miller et al., 2020 and 70% of completion in Stewart et al., 2015) due to change in life circumstances, sickness of family members, program burden, employment, or no longer interested (Ponguta et al., 2019).

Acceptability of the study was explicitly measured in 30% of studies (n=3) and examined using satisfaction surveys (Betancourt et al., 2019), qualitative interviews (Ballard et al., 2017), and external observations (Ponguta, 2019). In terms of cultural appropriateness, three studies (30%) utilized community advisors or stakeholders to adapt their interventions to reflect cultural norms, preferences and dynamics. For example, one study created a community advisory committee designed to guide the planning and implementation of the study according to the population of participants (Stewart et al., 2015).

Finally, three of the ten studies reported on fidelity to the intervention (Ballard et al., 2017; Miller et al., 2020; Ponguta et al., 2020). Miller et al. (2020) conducted implementation fidelity checklists that indicated that nearly all activities were implemented as designed. Ponguta et al. (2020) conducted observations of the sessions and found that mothers were eager for social connectedness and talk about their own lives, but this was logged by the trainers as significantly reducing the time available for the intended delivery of the session’s content.

In terms of challenges to implementation, four of the ten studies noted that the presence or absence of resources including transportation, childcare, refreshments and access to familiar venues influenced the implementation of the family intervention (Stewart et al., 2015; Ballard et al., 2017). To overcome common barriers to accessing services, Betancourt et al. (2019) utilized a home visiting model to meet participants in their homes.

4. Discussion

This review examined the literature on family-based mental health interventions for refugees to assess types of family interventions, intervention components, characteristics concerning intervention delivery, and the current state of evidence for such interventions. Perhaps the biggest takeaway from the review is the limited state of the literature on family-based mental health interventions for refugees, with only 10 studies which met inclusion criteria. The majority of studies were conducted with refugees in resettlement and those conducted with refugee communities in the Global South were concentrated in the Middle East region.

We identified three different intervention types including parenting skills groups, multiple family groups and home visiting interventions which are likely not exhaustive, and which were implemented in school and community settings and the home by lay providers or community members, sometimes in conjunction with mental health professionals or research personnel. Parenting interventions were the most common, implemented with refugee caregivers in humanitarian settings and resettlement locations. Home visiting approaches were the least common and among the multiple family group interventions reviewed, only one was delivered with refugees in the Global South.

Fourteen different intervention components were identified from our analysis to address mental health, family process and functioning and displacement and resettlement concerns. Interestingly, this analysis revealed a great deal of consistency of intervention components across diverse intervention types—especially positive parenting skills, family communication practices, social skills training, psychoeducation and self-management strategies for emotional distress, especially for caregivers. There were few differences in terms of components used with refugee families in humanitarian vs. resettlement contexts. For example, interventions for refugee families who were resettled included education components about common adjustment or acculturation issues. Additionally, discussion of and connection to resources, often offered by resettlement organizations or mental health centers in the community, were incorporated into interventions occurring in resettlement settings. Discussion often included limitations and barriers to receiving support from community organizations and the subsequent impact on family adjustment, and further needs were outlined.

Different from resettlement-based studies, family-based interventions in the Global South including humanitarian settings tended to be shorter, likely due to the nature of humanitarian emergencies and the content attended to security issues and how parents ensure safety in precarious settings. These interventions also acknowledged challenges of employing certain interventions (e.g., positive parenting skills given families limited resources and means) due to limitations in the humanitarian settings. Though the evidence base is at a very early stage, these findings relative to commonalities across intervention types and settings provide a starting point for imagining a common elements approach for prevention-oriented family-based mental health interventions that could be used with refugees across diverse settings and contexts (Murray et al., 2014; Singla et al., 2017).

Consistent with the overall movement towards task-sharing, most studies were implemented or co-facilitated by non-specialists, peers or community providers (Patel et al., 2018). Similar to other reviews (e.g., Bunn et al., 2021), support provided in terms of training and supervision were generally not well described and there was heterogeneity of terms used to refer to non-specialist, community or lay providers and their qualifications were minimally described beyond shared characteristics (e.g., from the same community). As has been found in other studies of peer interventions, findings suggest that the use of non-specialist, community or peer providers may help to create a safe space and balance traditional power dynamics between provider and client and enable the support of like-ethnic peers (Acri et al., 2021). Yet, challenges in treatment fidelity can arise if peer providers are not given adequate support and ongoing supervision.

Findings indicate that family-based mental health interventions are generally feasible to implement and acceptable to families and cultural adaptation processes including those that utilize community advisory boards or cultural consultation processes may enhance acceptability across culturally diverse refugee groups (Cabassa & Baumann, 2013).

Our analysis of outcomes indicates that the evidence base for family-based mental health interventions for refugees is emerging and that diverse family-based models could be potentially effective for improving child and caregiver mental health and improving a range of family processes and functioning indicators.

In terms of parenting groups, the most consistently reported positive outcomes related to parenting, especially disciplinary style with less consistent findings related to parenting skills, parenting stress and parental expectations among Syrian, Palestinian and African refugees from Sierra Leone, Democratic Republic of Congo and Burundi. There is some indication that parenting groups can also improve caregiver mental health and psychosocial wellbeing (stress, wellbeing, stress management), particularly when the intervention integrates strategies that directly address caregiver wellbeing (see Miller et al., 2020). Indeed, pilot studies that did not include caregiver anxiety and stress management approaches observed either no change or a worsening in caregiver mental health (see Stewart et al., 2015; Ballard et al., 2017), findings that...
require additional investigation. Parenting groups may also support changes in child mental health (including depression, emotional problems and PTSD) though results were uneven in this area.

Findings indicate that multiple family group models for Kosovar, Bosnian and Syrian refugee families are promising for improving social support, knowledge about mental health and service use among adults, decreasing child behavioral problems and improving parenting, family hardness and family communication. Finally, home visiting interventions may be effective in improving child mental health (including depression and traumatic stress reactions) for Bhutanese and Somali Bantu children and reducing family arguments for Bhutanese families. However, the majority of studies in this review were pilot trials not powered to detect effectiveness and six out of ten studies utilized weaker research designs which is a limiting factor in interpreting these findings and contextualizing the evidence about family-based mental health interventions.

The review also reveals gaps in need of attention and areas for further consideration and development. This includes a need for greater specificity about the definition and conceptualization of family-based mental health interventions, the need for family-based treatment models, clearer articulation of implementation processes, particularly when utilizing non-specialist and peer providers, addressing common challenges related to father engagement and recruitment of families and strengthening the available evidence base for family-based mental health interventions. We discuss these in greater depth below.

First, our review revealed inconsistency about the very meaning and definition of family interventions. Many studies that were reviewed (and ultimately excluded) described their work as a family intervention, though in practice were child mental health interventions with a primary focus on improving child wellbeing, did not include other family members in interventions and only examined child mental health outcomes (e.g., Björn et al., 2013). Also common were studies that only included adult participants and while focusing on general wellness and coping, did not measure family-level outcomes or focus on family strengthening methods in the intervention (e.g., de Valenzuela, 2014; van Wyk et al., 2012). This points to the need for a clear and conceptually distinct conceptualization of family-based mental health interventions, relevant to practitioners and that can guide intervention development and research in this area moving forward. As indicated at the beginning of this paper, we propose the following definition. A family-based mental health intervention is a social or psychological intervention that has a goal of improving the mental health and psychosocial wellbeing of family members and improving family processes, family context and functioning and which collects mental health outcomes from at least two generations as well as family level outcomes.

Second, studies in this review are best characterized as prevention-oriented interventions which sought to mitigate mental health problems or reduce the risk of escalation of mental health problems common to refugee families by strengthening known protective processes and factors within the family system (e.g., communication, parenting skills, parent-child relationship). While such an approach is consistent with secondary prevention frameworks guiding global mental health and psychosocial support interventions (IASC, 2007), it is important to note the absence of any family-based mental health treatment interventions detected in this review and thus, the need for future investments in this area (Bosqui et al., 2021).

Third, one important discussion across some studies related to father engagement and the role of fathers in family-based interventions. Frequently noted was the difficulty of ensuring father participation when implementing the intervention and the resulting disproportionate participant population of mothers to fathers, a trend that has been observed in intervention studies with families in LMIC settings more generally (Panter-Brick et al., 2014) and with refugee families specifically (Bond, 2019). One study sought to address the lack of father engagement through various recruitment strategies, which included scheduling community outreach at non-conflicting times for men, using male outreach workers to recruit fathers, and requiring both caregivers to participate in the intervention as an inclusion criterion, which prompted many interested women to encourage participation in their male counterpart and improved father participation in all phases of the study (Miller et al., 2020). Other studies have used videos and homework to involve fathers, even if they are not able to attend (Weine et al., 2021).

Moving forward, these and other strategies are needed to overcome underrepresentation of fathers in interventions and engage and retain whole families in services more generally. This is a frequently identified challenge in family-based mental service delivery, and rigorous engagement methods are needed (Weine et al., 2005) along with additional exploratory research to identify how to best approach this across diverse cultural groups and settings.

Fourth, to better contextualize the benefits of lay or non-specialist provider-led family-based interventions and disseminate models, it will be important to establish and codify how we select, train, and supervise such providers (Kohrt et al., 2020). Furthermore, future research would benefit from an in-depth understanding of provider factors, and the unique needs of providers with shared life experiences to those they deliver care (e.g., refugee peer providers) and thus, who have similar life experiences of trauma and displacement. There are important workforce development initiatives underway focused on competencies needed to deliver evidence-based interventions and services (WHO, n.d.) and providing supervision for non-specialist providers (IFRC, n.d.). Moving forward, it will be important to include competencies and supervision needs specific to delivery of family-based mental health models into such initiatives. And though we noted little to no discussion of common therapeutic factors including those specific to family-based models (e.g., rapport building with family, observation and reflection of family interaction patterns, managing family dynamics), such competencies will inevitably be an important part of evidence-based family mental health practice and deserve greater attention moving forward (Spremke et al., 2013).

Finally, though the review indicates that family-based mental health intervention may improve diverse mental health and family level outcomes, the current state of the evidence is very limited with a majority of pilot level and non-randomized study designs. This is true across migration contexts but especially so for studies conducted with refugee families in humanitarian emergencies. Non-randomised studies included in the review had inconsistent and imprecise results, and many lacked detail to appropriately assess confounding, selection of participants for inclusion and measurement of effectiveness. The findings make clear the need for additional rigorous research on family-based mental health prevention and treatment interventions with diverse refugee communities in resettlement and displacement settings in the Global North and South. To rigorously build the evidence and guide intervention and service selection, we recommend that future evaluations of family-based mental health intervention are carefully designed to minimize selection bias, have pre-specified protocols and analysis plans and undertake appropriate statistical analysis to adjust for confounding and the effect of temporal trends.

4.1. Limitations

Our analysis of intervention components was limited to those described in the included studies and will benefit from further refinement moving forward. The pilot nature of many of the included studies precludes strong conclusions about the effectiveness of family-based interventions. Furthermore, there was a high level of heterogeneity between studies, which limits the ability to compare findings from different studies and thus, we were only able to conduct a narrative review of outcomes.

5. Conclusion

Research indicates that experiences of war and forced migration can
undermine the entire family system, resulting in parenting challenges, intergenerational conflict, and poor mental health and functioning in children and caregivers alike. Given this complex set of vulnerabilities, family-based mental health interventions have the potential to reduce mental health problems and strengthen family processes and functioning essential for long term health and wellbeing. This review indicates that mental health problems and strengthen family processes and functioning children and caregivers alike. Given this complex set of vulnerabilities, this review indicates that mental health problems and strengthen family processes and functioning children and caregivers alike.

Table A2

| #1 | ('refugee'/exp OR 'refugee camp'/exp OR 'refugee'/ti,ab OR 'refugee's/ti,ab OR 'asylee's/ti,ab OR 'asylum seeker's/ti,ab OR 'asylum seeking's/ti,ab OR 'asylum seeker'/ti,ab OR 'asylum seekers'/ti,ab OR 'humanitarian crisis'/ti,ab OR 'humanitarian crises'/ti,ab OR 'internally displaced'/ti,ab OR 'internally displaced person'/ti,ab) AND ('migrant'/exp OR 'immigrant'/exp OR 'immigration'/exp OR 'migration'/exp OR 'immigrant's/ti,ab OR 'immigrant's/ti,ab OR 'immigrant'/ti,ab OR 'migrant'/ti,ab OR 'migration'/ti,ab) AND (military/EXP OR ('prisoner of war'/exp OR 'war'/ti,ab OR 'trauma'/ti,ab OR 'traumatic'/ti,ab OR 'traumatic stress'/ti,ab OR 'psychotrauma'/exp OR 'war'/ti,ab OR 'warfare'/ti,ab OR 'conflict'/ti,ab OR 'violence'/ti,ab OR 'violent'/ti,ab OR 'trauma'/ti,ab OR 'traumatic'/ti,ab OR 'political'/ti,ab OR 'torture'/ti,ab OR 'torture'/ti,ab OR 'displaced'/ti,ab OR 'forced'/ti,ab)) |
| #2 | ('family'/exp OR 'family health'/exp OR 'family'/ti,ab OR 'family-based'/ti,ab OR 'family' OR 'family's/ti,ab OR 'family'/ti,ab OR 'family'/ti,ab OR 'inter-family'/ti,ab OR 'intra-family'/ti,ab OR 'interfamily'/ti,ab OR 'inter family'/ti,ab OR 'intra family'/ti,ab OR 'inter caregiver'/ti,ab OR 'inter caregivers'/ti,ab OR 'inter-generational'/ti,ab OR 'multi-generational'/ti,ab OR 'generations'/ti,ab OR 'two generation'/ti,ab OR 'three generation'/ti,ab) |
| #3 | ('Program Evaluation'/mesh OR 'Needs Assessment'/mesh OR 'Referral and Consultation'/mesh OR 'Pilot Projects'/mesh OR 'Program Development'/mesh OR 'Psychotherapy'/mesh OR 'therapy'/subheading OR 'methods'/subheading OR 'prevention and control'/subheading OR 'therapeutic use'/subheading OR 'education'/subheading OR 'Treatment Outcome'/mesh OR 'Case Reports'/pt OR 'Clinical Study'/pt OR 'Comparative Study'/pt OR 'Multicenter Study'/pt OR 'intervention'/ti,ab OR 'interventions'/ti,ab OR 'interventional'/ti,ab OR 'program'/ti,ab OR 'programs'/ti,ab OR 'programme'/ti,ab OR 'programmes'/ti,ab OR 'programming'/ti,ab OR 'service'/ti,ab OR 'services'/ti,ab OR 'trial'/ti,ab OR 'model'/ti,ab OR 'models'/ti,ab OR 'tool'/ti,ab OR 'tools'/ti,ab OR 'training'/ti,ab OR 'therapy'/ti,ab OR 'therapies'/ti,ab OR 'therapeutic'/ti,ab OR 'psychotherapy'/ti,ab OR 'psychoeducation'/ti,ab OR 'counseling'/ti,ab OR 'postintervention'/ti,ab OR 'outcome'/ti,ab OR 'outcomes'/ti,ab OR 'study'/ti,ab OR 'studies'/ti,ab OR 'prevention'/ti,ab OR 'promotion'/ti,ab) |

Declaration of competing interest

Mary Bunn has no conflicts of interest to report. Nicole Zolman has no conflicts of interest to report. Chloe Polunin Smith has no conflicts of interest to report. Rosie Hanneke has no conflicts of interest to report. Theresa S. Betancourt has no conflicts of interest to report. Stevan Weine has no conflicts of interest to report.
Appendix B. Risk of Bias Assessment

Table B1
Risk of bias assessment for randomized trials. Domains: D1- Bias arising from randomization process, D2- Bias due to deviation in intended intervention, D3- Bias due to missing data, D4- Bias in measurement of outcome, D5- Bias in selection of reported result.

<table>
<thead>
<tr>
<th>Author</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betancourt et al. (2020)</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Miller et al. (2020)</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Ponguta et al. (2020)</td>
<td>low</td>
<td>low</td>
<td>some concerns</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Weine et al. (2008)</td>
<td>low</td>
<td>low</td>
<td>concerns</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
</tbody>
</table>

Table B2
Risk of bias assessment for non-randomized trials. Domains: D1- Bias due to confounding, D2- Bias due to selection of participants, D3- Bias in classification of interventions, D4- Bias due to deviations in intended interventions, D5- Bias due to missing data, D6- Bias in measurement of outcomes, D7- Bias in selection of reported result. Judgement: N= no information, n/a= not applicable to the study.

<table>
<thead>
<tr>
<th>Author</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>D6</th>
<th>D7</th>
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</tr>
</thead>
<tbody>
<tr>
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References


