Review article

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Supporting the mental health of forcibly displaced children

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Abstract

Close to 50 million children under 18 years of age are currently forcibly displaced from their homes because of armed conflict and other emergencies. Displaced children and adolescents are at increased risk of developing poor mental health. However, knowledge about how best to support their mental health and well-being is limited. In this Review, we consolidate knowledge on the prevalence of mental disorders in settings of forced displacement, discuss individual differences in response to war and displacement, and review existing mental health and psychosocial support approaches. Critical assessment of this literature indicates a substantial mental health burden among displaced children and supports a broad range of risk and resilience mechanisms. Although some specific mental health and psychosocial support interventions have positively influenced forcibly displaced children's mental health, there is a need for more culturally and contextually relevant, accessible and evidence-based services that also address family and community factors during displacement. We discuss recommendations to ensure that these services are linked to strategies that target adverse conditions and structural barriers and strengthen the socio-ecological resources that contribute to children's positive development and well-being.

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Introduction

The term 'forcibly displaced' refers to populations who have had to leave their homes owing to armed conflict or other emergencies[1], and includes internally displaced persons who have had to relocate within their home country as well as refugees and asylum seekers who have left for a host country. The number of forcibly displaced children (younger than 18 years) reached a staggering 47.2 million in 2023 – the highest number since World War II[2] – coinciding with several emerging conflicts and heightened volatility across the globe owing to political instability[3] and climate change[4].

The majority of forcibly displaced children are hosted in low- and middle-income countries (LMICs)[2]; only about 25% of displaced children resettle in well-resourced high-income countries (HICs)[5] (Box 1). Across LMICs and HICs, most displaced children experience substantial post-resettlement challenges[6,7] in addition to the long-term effects of exposure to conflict and displacement[8]. The experience of war or other crises, the loss of home, family and friends, and the enduring challenges of displacement and resettlement (such as socio-economic marginalization and limited access to school) puts displaced children at high risk for the development of mental health conditions[9-11]. It is estimated that more than 50% of forcibly displaced children in highly adverse contexts experience mental health problems[12], a rate over four times higher than the global estimate (13%) for non-displaced children[13].

To address mental health and psychosocial support (referred to by the acronym 'MHPSS' in expert contexts), a wide range of programmes have been developed to protect or promote the psychosocial well-being of displaced children and to prevent or treat mental disorders[14]. However, up to 90% of forcibly displaced children with mental health problems in LMICs never receive appropriate care[15,16]. Services in LMICs and humanitarian settings are usually dependent on short-term funding and often hampered by various challenges that limit the availability and accessibility of appropriate support[17]. Challenges include under-resourced local health and protection systems[18], limited mental health aid budgets[19,20], a scarcity of trained mental health professionals and poor coordination among services provided by non-governmental organizations and local systems[21,22]. Following these (and other) challenges, research and intervention efforts have adjusted from a narrow focus on identifying and treating mental disorders to encompass more integrated, community-based approaches that also target prevention and promotion. These efforts take a socio-ecological and systems approach to understand why some children show persistent mental health problems whereas others show remarkable resilience when coping with adverse experiences[23,24]. In addition, the focus of research has shifted from the evaluation of single interventions to implementation science to understand how systems can support successful and sustainable implementation of effective interventions that are culturally and contextually relevant in each setting.

In this Review, we critically reflect on current approaches to mental health and psychosocial support for forcibly displaced children. Our Review is based on systematic literature reviews that were selected for thematic relevance (not screened for robustness) and provides examples of notable research and intervention work. First, we synthesize current knowledge on the prevalence of mental health problems among forcibly displaced children and related risk factors. Next, we discuss individual and community differences in response to war and other adversities and the mechanisms that underlie resilience. We then consider the evidence for the effectiveness of mental health promotion, prevention and treatment interventions for forcibly displaced children and focus on the components and mechanisms needed for successful implementation of these interventions in relevant contexts. Finally, we discuss lessons learnt with a focus on addressing needs, bolstering resilience, designing effective interventions and strengthening psychosocial support for war-affected and forcibly displaced children[25].

Throughout the Review, we apply a socio-ecological systems perspective[26]. Accordingly, we view mental health and well-being in forcibly displaced children as involving psychosocial factors (such as parenting, the experience of structural violence, discrimination and poverty) and bioecological factors (such as the physical and built environment) across nested system levels connected through mediating pathways[23]. These levels include the individual (personality and genetic factors), their immediate microsystems (such as family), more distant exosystems (such as the community), higher-order macrosystems (such as the socio-political context and cultural norms) and the chronosystem (changes over the life-course). This model helps us to consider how individual, family and community-level factors interlink to influence mental health and how to integrate intervention benefits into sustainable and coordinated multisectoral systems of care that promote culturally and contextually relevant programme implementation[27].

Prevalence of mental health conditions

Scholarly literature has consolidated knowledge on the prevalence of mental disorders among forcibly displaced children. Seven systematic reviews of surveys and/or qualitative studies of mental illnesses in conflict and post-conflict contexts noted substantial heterogeneity across studies and a broad range of prevalence rates across mental disorders. For example, one initial review[9] reported a 47% pooled prevalence rate of post-traumatic stress disorder (PTSD) among children exposed to war, indicating that as many as one in two children might meet the criteria for this condition in the wake of war. However, this pooled estimate was based on studies reporting heterogeneous results, with both low (4.5%) and high (89.3%) prevalence estimates. Another review published 10 years later[10] indicated a 22.71% prevalence rate of PTSD among refugees and asylum seekers, with one in five children meeting the criteria for this condition and large confidence intervals (between 12.79% and 32.64% across studies). Systematic reviews have similarly presented substantially heterogeneous findings for other mental disorders; for example, the estimated prevalence of depression among war-affected children displaced to HICs varied between 3% and 30% in one review[11] (Table 1).

There are two main reasons for such heterogeneity in the estimates. First, studies included populations that were very diverse in age, country of origin, experiences before, during and after migration, legal status, resettlement conditions, and access to services and other forms of support[28]. Forcibly displaced people are far from a homogeneous group, and failure to account for these distinct differences prohibits meaningful estimates. Risk factors and manifestations of poor mental health differ according to developmental stage, gender, disabilities and context-dependent variables[28,29]. However, studies generally do not disaggregate data along these lines. Furthermore, little research has been conducted with forcibly displaced children hosted in LMICs[9,10], who are often exposed to more adverse contexts than children in HICs and therefore are at increased risk for mental health problems. Varying living conditions within LMICs might also have different effects on mental health. For example, in two separate studies, whereas more than 50% of Syrian refugee children living in informal tented settlements in Lebanon met the criteria for mental disorders[12], the rate was 23.7% for Syrian refugee children living in more stable urban settings in Turkey[30]. However, at present the unique effects of contextual factors are not well understood.

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Box 1 | Origins and residence of forcibly displaced children by 2023

By the end of 2023, 47.2 million children under the age of 18 years were displaced as a result of conflict and violence[166,167] (see the figure).

Some of these children were forced to flee their homes but remained living in their country of origin (internally displaced). By 2023, 3.1 million children were internally displaced owing to natural disasters and 28.1 million children owing to conflict and violence. Internally displaced children were mostly based in Sudan (4.2 million), Democratic Republic of Congo (3.6 million), Afghanistan (2.8 million), Syrian Arab Republic (2.6 million), Somalia (2.1 million), Yemen (2.1 million), Ethiopia (1.7 million), Nigeria (1.7 million), Colombia (1.3 million) and Burkina Faso (1.0 million).

Externally displaced children are those who have been forced to flee their country of origin and are now living in a different country (country of residence). By the end of 2023, 15.3 million child refugees were externally displaced. This group included refugees and asylum seekers. Refugees are individuals who have fled their countries to escape conflict, violence or persecution and have sought safety in another country. There is usually a refugee status determination process to establish whether an individual's circumstances make them a refugee. Sometimes people fleeing from a particular situation are granted refugee status 'prima facie'.

Palestinian refugee children are those who have lost their home and means of livelihood in Palestine since the 1948 Arab–Israeli conflict and are registered with the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). This group includes Palestinian refugees and their descendants living in Gaza, West Bank, Jordan, Lebanon and Syria who are younger than 18 years. By the end of 2023, there were 1.7 million Palestinian registered refugee children.

Asylum-seeking children are those who have left their country of origin and formally applied for asylum in another country but whose refugee status determination is still pending. There were 2 million asylum-seeking children by the end of 2023.

In 2023, about 50% of all refugee children registered with the United Nations High Commissioner for Refugees (UNHCR) came from just three countries: Afghanistan (3.1 million), Syrian Arab Republic (2.9 million) and Ukraine (1.9 million). The remaining displaced children originate mostly from Venezuela, South Sudan, Sudan, Myanmar, Democratic Republic of Congo, Somalia and Central African Republic.

About 69% of all externally displaced children settle in directly bordering countries. In 2023, the most common countries of residence were Iran (1.9 million), Turkey (1.6 million), Pakistan (1.0 million), Uganda (0.9 million), Germany (0.8 million), Colombia (0.8 million), Ukraine (0.7 million), Chad (0.6 million), Ethiopia (0.6 million), Bangladesh (0.5 million) and Russian Federation (0.5 million).

Legend:
- >1 million
- 250,000–1 million
- 50,000–250,000
- 5,000–50,000
- 500–5,000
- 1–500
- None
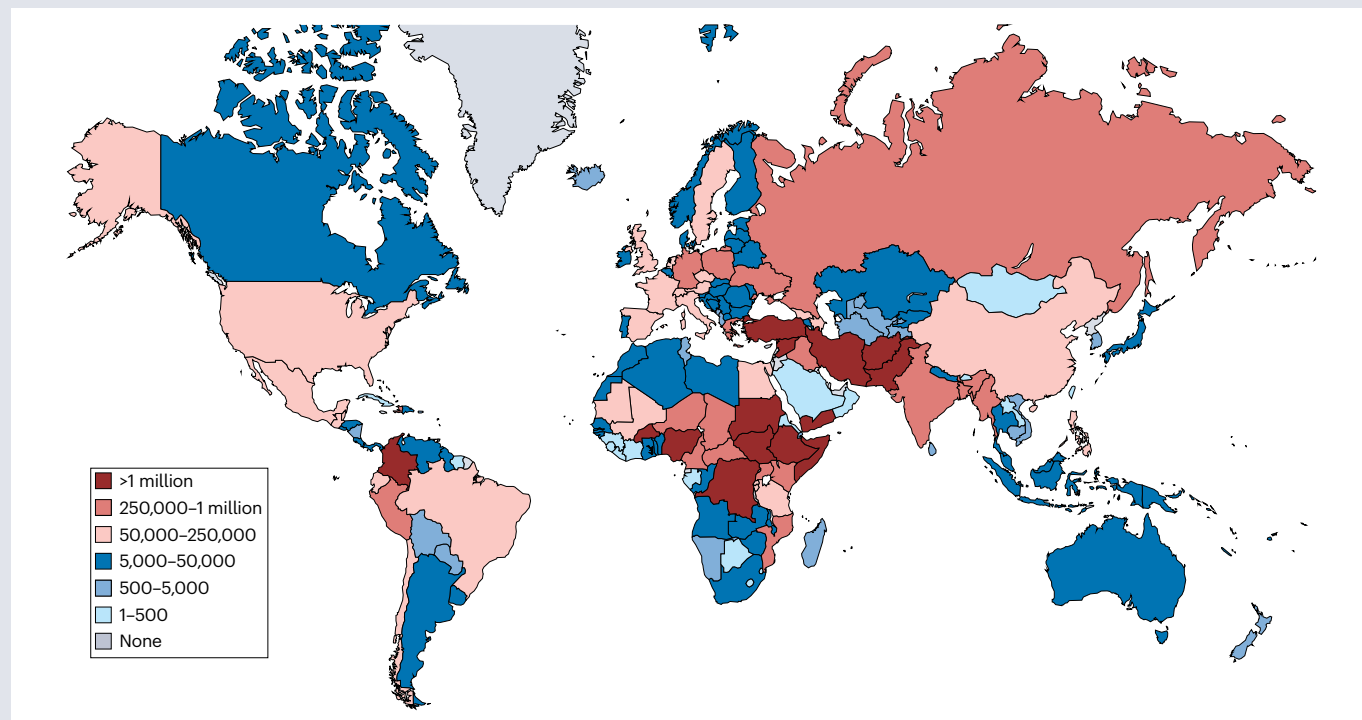
Second, studies have relied on very diverse research methodologies to establish the prevalence of mental disorders across populations. Especially in low-resource settings, prevalence rates were established from self-report symptom-rating measures and psychometric questionnaires, which might overestimate symptomology[10]. Data on mental disorders were rarely triangulated across multiple informants (children, caregivers and teachers), and relatively few population-level studies applied clinical interviews − often viewed as the gold

Table 1 | Prevalence of mental disorders among forcibly displaced children across systematic reviews

Sample characteristics (age range)	Sample size	Host country or region	Country or region of origin	Prevalence (95% confidence interval)				Ref.
				PTSD	Depression	Anxiety	Other disorders	
Refugees, war survivors, residents, expatriates and IDP[a] (5–17 years)	Total n=7,920 across 17 studies; range, 22–2,976 per study	Israel, Bosnia and Herzegovina, Gaza, Greece, Iraqi Kurdistan, Kuwait, Palestine, Rwanda, Sweden, UK, USA	Israel, Palestine, Gaza Strip, Bosnia and Herzegovina, Persian Gulf, Cambodia, Rwanda, Central America	17 studies, 47% pooled estimate (35–60%); range=4.5–89.3%	4 studies, 43% (31–55%)	3 studies, 27% (21–33%)	NA	9
Refugees and asylum seekers[b] (10–19 years)	Total n=779 across 8 studies; range, 90–197 per study	Germany, Malaysia, Norway, Sweden, Turkey	Middle East, Africa, South Asia, other regions	7 studies, 22.71% (12.79–32.64%)	5 studies, 13.81% (5.96–21.67%)	4 studies, 15.77% (8.04–23.50%)	ADHD, 4 studies, 8.6% (1.08–16.12%) ODD, 4 studies, 1.69% (0.78–4.16%)	10
Refugees hosted in Western countries[c] (<25 years)	Total n=3,003 across 22 studies; range, 40–1,078 per study	Canada, Denmark, Netherlands, Sweden, UK, USA	Angola, Ethiopia, Iraq, Somalia, Sudan, other	7 studies, range=19–54%	3 studies, range=3–30%	NA	Internalizing and externalizing behavioural problem, 7 studies; no prevalence rate available	11
Children and adolescents living in areas of armed conflict in the Middle East (1–19 years)	Total n=52,977 across 71 studies; range, 29–4,054 per study	Israel, Palestine, Iraq, Lebanon	NA	Israel, range=5–8% Palestine, range=23–70% Iraq, range=10–30% Lebanon, insufficient data	Israel, 2 studies, 3.3% Palestine, 11.3%	Israel, 3 studies, 1.4% Palestine, range=40–100%	ADHD, Israel, 2 studies, 3% ADHD, Palestine, 10%	161
Forcibly displaced children and adolescents resettled in HICs[d] (2–19 years)	Total n=5,776 across 44 studies; range, 39–920 per study	Australia, Belgium, Canada, Croatia, Denmark, Finland, Netherlands, Sweden, UK, USA	Bosnia and Herzegovina, Cambodia, Central America, Chile, Croatia, Cuba, Iraq, Middle East, Somalia, Sudan, Vietnam, former Yugoslavia	1 study, 38% if severe violence exposure; 11% if some violence exposure	No pooled prevalence estimated	No pooled prevalence estimated	No pooled prevalence estimated	7
Forcibly displaced children and adolescents resettled in LMICs[d] (4–23 years)	Total n=5,765 across 27 studies; range, 45–3,415 per study	Costa Rica, Honduras, India, Nepal, Nicaragua, Pakistan, Thailand, Turkey, Uganda	Afghanistan, Bhutan, Bosnia and Herzegovina, Cambodia, Democratic Republic of Congo, Kosovo, El Salvador, Eritrea, Guatemala, Iraq, Namibia, occupied Palestinian territory, Sudan, Tibet	No pooled prevalence estimated	No pooled prevalence estimated	No pooled prevalence estimated	No pooled prevalence estimated	146
Children and adolescents in conflict-affected LMICs (including IDPs, refugees, former child soldiers, schoolchildren)[d] (10–17 years)	Total n=34,291 across 53 studies; range, 6–14,649 per study	Middle East, Central Asia and Eastern Europe, Eastern and Southern Africa, South Asia, other regions	NA	NA	No pooled prevalence estimated	No pooled prevalence estimated	No pooled prevalence estimated	25

ADHD, attention deficit and hyperactivity disorder; HICs, high-income countries; IDP, internally displaced people; LMICs, low- and middle-income countries; NA, not available; ODD, oppositional defiance disorder; PTSD, post-traumatic stress disorder. [a]Meta-regression analysis of studies among children exposed to war (four of them conducted in the midst of conflict). [b]Meta-analysis of studies using quantitative prevalence estimates of DSM (Diagnostic and Statistical Manual of Mental Disorders)[23] categories of mental illness identified through clinical interviews. [c]Included non-clinical studies and used STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) reporting standards to determine prevalence rates. [d]Did not include meta-analysis because of clinical and/or methodological heterogeneity across studies, but analysed risk and/or protective factors across quantitative and/or qualitative studies.

standard in assessing individual mental health based on standard criteria[31].

Furthermore, key debates remain regarding the cross-cultural relevance of Western clinical models of mental health in humanitarian and LMIC contexts. For example, research and evaluation studies designed from a Western psychiatry standpoint often focus on PTSD, depression and anxiety disorders, but overlook the importance of the everyday burden of psychosocial and structural stressors — such as those linked to restricted education and socio-economic exclusion. These studies also lacked consideration of differences in symptom expression across cultures and contexts[32]. Identifying and responding to non-clinical psychological distress is crucial in contexts of chronic adversity and protracted displacement[33], with criticisms highlighting the potential dangers of pathologizing typical reactions to traumatic experiences. Culturally relevant and developmentally informed conceptualizations of mental health needs still need to be developed[10,19,34,35] to better understand what drives poor mental health and what can most effectively accelerate mental health recovery for children experiencing forced displacement.

Pathways to resilience

Various conceptual models of psychological resilience (broadly defined as the process of positive adaptation in the context of adversity[36,37]) have been developed over the past 50 years[38–42] to describe individual differences in response to childhood adversities, including war and displacement[23,35,43–45]. At their core, resilience models suggest that some children are less negatively affected by adversity than others owing to co-occurring protective factors[46,47] that buffer the impact of negative experiences. Knowing what predicts individual differences in response to war and displacement is crucial to identifying displaced children who are vulnerable to the negative impacts of war and displacement, and to guiding effective mental health and psychosocial support services. In this section, we discuss published work on these mechanisms in the context of war and displacement from the perspective of a socio-ecological systems theory[26].

Defining resilience in children

Frameworks of psychological resilience are increasingly popular. However, the concept of resilience and its application are not without criticism, because the varying conceptualizations of resilience can be difficult to operationalize. For example, despite the often extremely adverse circumstances to which forcibly displaced children are exposed, between 20% and 80% of displaced children — about 65% on average — do not present mental health conditions[9–11], pointing to psychological resilience. However, traditional studies investigating individual differences in response to war and displacement focused on single mental disorders such as PTSD or depression (unidimensional analyses of mental health)[9–11]. By contrast, the proportion of resilience outcomes decreased to about 20% when multiple dimensions and co-occurring mental disorders were considered simultaneously (multidimensional analyses of mental health)[48]. These findings suggest that considering only one disorder — such as PTSD — as an outcome is insufficient and likely to be misleading, because different children might develop different mental health problems in response to exposure to the same adverse events (multi-finality)[49]. For example, following war exposure, a child might not display PTSD symptoms but, instead, might develop depression or aggressive behaviours; this child cannot be labelled 'resilient' on the basis of only the absence of PTSD symptomology[12,48].

Moreover, to indicate psychological resilience, the absence of mental disorders should also be accompanied by the presence of positive everyday functioning. Thus, resilience assessment should also include measures of adjustment and positive psychosocial outcomes[50], such as daily functioning, adaptive coping, self-efficacy, self-esteem, social and emotional competence, and well-being. This assessment also requires a careful distinction between outcomes and mechanisms: the positive outcomes of resilience are often measured in terms of subjective well-being or social functioning, whereas the mechanisms of resilience are those that facilitate the development of such outcomes, including self-efficacy.

Risk and resilience factors across system levels

Through our review and synthesis of the relevant literature, we identified several factors that might increase risk or resilience in forcibly displaced children (Table 2). At the individual level, adaptive coping strategies (such as cognitive restructuring and seeking social support) were associated with good mental health in Syrian refugee children. By contrast, avoidance strategies such as wishful thinking and social withdrawal were associated with poor mental health[51]. Other relevant individual factors included poor health leading to increased risk[23,48] and high cognitive abilities[45,52] leading to increased resilience. The underlying mechanisms of these effects might include high-order processes such as regulatory flexibility[53], defined as dynamic behavioural adjustment and change in the face of demanding situations.

Most research at the microsystem level has focused on family factors, such as the importance of responsive parenting practices, family dynamics and parental mental health. For example, supportive parenting was associated with better academic achievement and fewer internalizing and externalizing problems in Arab refugee adolescents[54]. In Syrian refugees, how parents negotiate their parenting expectations (and spousal interactions) was associated with child mental health and learning competencies beyond parental engagement[55]. Similarly, higher scores of parental PTSD, depression and anxiety symptoms differentiated Syrian refugee children at risk for mental health conditions from psychologically resilient children[48]. Furthermore, exposure to armed conflict was associated with poorer parental mental health, which had implications for family-level dynamics, caregiving practices and child health, development and learning outcomes[56–61], whereas positive family functioning had a buffering effect on youth outcomes[62,63].

At the exosystem level, access to and a positive experience of school emerged as central resilience factors among forcibly displaced children. For example, a more positive experience of school was associated with fewer PTSD symptoms in Iraqi refugee children[64]. Similarly, higher social support from the community was associated with reduced depression, PTSD and externalizing problems in Syrian refugees living in Lebanon[12].

Finally, at the macrosystem level, access to and availability of basic public services was associated with reduced symptoms of PTSD and externalizing problems in Syrian refugee children[12]. Importantly, the macrosystem level was the least researched, which means that resilience is more often understood in the context of psychosocial and community rather than structural factors.

Multisystemic pathways

Resilience is shaped by multiple system levels which change over time (chronosystem)[23]. Thus, resilience is likely to be dynamic in response to changes across system levels, especially given the instability and

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Table 2 | Risk and resilience factors by system levels

System level	Risk factors	Resilience factors
Individual	High exposure to war events (especially violence towards oneself and close people)[12,35,162] Exposure to war in past 1 month–5 years[35] Older age at exposure[12,45,52,163] Low general health[23,48] High environmental sensitivity[23,48] Avoidance coping strategies[48,164] High cortisol levels[70,148] Genetic predisposition for mental health problems[70,148]	Gender: girls more resilient for externalizing problems; boys more resilient for depression and PTSD[12,45,52] Younger age at exposure[45,52,163] High levels of personality traits such as self-esteem[23,48,52,163], optimism[23,48,52,162], self-control[45] and self-efficacy[45,52,162,163] High cognitive abilities[45,52] and internal locus of control[35] Religious beliefs and practices (meaning and hope)[35,45,52,162] and maintenance of cultural identity[163] Acculturation (including language acquisition)[45,52,163,164] Adaptive coping strategies (cognitive restructuring)[52]; altruism and prosocial behaviour[35] Future orientation and aspirations[65]
Microsystem	Separation from and loss of caregivers (especially fathers)[35,162] Caregiver's poor mental health (PTSD, depression, anxiety)[12,23,48,164] and poor general health[23,48] Child–caregiver conflicts[12] Maltreatment by parents[12,23] High maternal psychological control[23,48] and low maternal acceptance[65] Experience of bullying[23,48,164]	Basic and financial needs met[162] Caregiver's good mental health[35] Low parent–child conflict[23] Strong bond with primary caregiver (maternal acceptance)[23,35,45,52] Supportive parenting[45,52], family unity[12,45,52,163] High parental education[52] and access to school[45,52,162,164] School connectedness and sense of belonging[52,164] Feeling safe at school[162,163]
Exosystem	Social isolation and loneliness[48,164] High human insecurity[23,162] Disruption of school or work[162]	Social support from community, teachers and peers[23,35,45,48,52,162–164] Community acceptance[12,45,52]
Macrosystem	No data available	Socio-economic condition[163] Availability and usage of health services[12,163] Socially inclusive society[162,163] Maintenance of cultural practices[163] Availability of legal status for refugees[162] Educational and employment opportunities[52,162] Respect for diversity and equality[52]

We identified risk and resilience factors based on systematic reviews[35,45,52,162–164] and key publications[12,48,165] on resilience among forcibly displaced children that included cross-sectional and longitudinal studies of various sample sizes. PTSD, post-traumatic stress disorder.

complexity associated with forced displacement. For example, in a study on resilience in Syrian refugee children, about 50% of the children who were considered resilient at one point (defined as being below clinical cut-offs for PTSD, depression and externalizing problems) no longer met criteria for resilience a year later, whereas others improved from being at risk to meeting the criteria for resilience[65].

Resilience-building approaches usually focus on individual-level outcomes but frequently neglect strengthening of resources at the family, community and structural levels[66]. A multisystem perspective cautions that efforts must be made at the structural level to change the systemic factors that engender stress and adversity over time[66,67] and underscores the importance of refraining from reducing resilience to personality traits or genes[48,68–71]. A viewpoint that attributes the mental health consequences of the adverse and oppressive structures of forced displacement to children themselves is problematic[54]; evidence suggests that resilience to adversity is most likely to reflect the combined protective function of multiple systems over time. Indeed, even children who show resilience in the wake of displacement require care and supportive systems around them throughout development.

According to theories of environmental sensitivity[72–74], including the theory of differential susceptibility[75], children differ in their response to both negative and positive experiences as a result of

individual differences in their sensitivity to environmental influences (for example, parenting quality). High environmental sensitivity reflects a more sensitive central nervous system on which environmental influences register more easily and more deeply, and has been associated with genetic, physiological and psychological markers of sensitivity[75,76]. More environmentally sensitive children are not only more vulnerable to the adverse effects of exposure to war and displacement[48,77], but also benefit more from positive and supportive experiences (vantage sensitivity[78]), including psychological interventions[79–82]. For example, only highly sensitive girls (assessed with the 12-item Highly Sensitive Child scale[83]) showed reduced depression symptom scores[81] after a school-based resilience-promoting programme[84] in a controlled trial among girls aged 11–13 years in a deprived inner-city context in the UK. Such findings show that highly sensitive children are likely to be more responsive to treatment, highlighting the need for alternative ways to support children who are less sensitive to environmental influences (Fig. 1).

In sum, individual differences in responses to armed conflict, other crises and displacement reflect the combined influence of the levels of adverse exposure and various risk and protective factors that threaten or support mental health. According to cultural and socio-ecological approaches to mental health theory and practice[85], resilience should be understood as fundamentally multisystemic[23,40,86]. However, more

work is needed to better understand how multiple resilience factors promote good mental health among forcibly displaced children.

Mental health and psychosocial support

There is increasing attention to the development and implementation of interventions to prevent and respond to the mental health challenges faced by forcibly displaced children. However, evidence gaps exist in the available evidence for mental health and psychosocial support interventions for displaced populations, and children specifically[87,88], and these hamper the wide-scale delivery of feasible, evidence-based interventions. In this section, we highlight the pressing need for further research in this area and outline key evidence-to-practice gaps on the basis of evidence from ten systematic reviews on such interventions for children who were exposed to humanitarian crises or forcibly displaced (Table 3).

Interventions across system levels

Overall, the ten reviews reported a growing number of evaluation studies of mental health and psychosocial support interventions at different stages of forced displacement and resettlement, with original studies indicating a range of potential benefits, such as decreases in symptoms

of anxiety, depression and traumatic stress[89–91] and improvements in daily functioning[92,93]. Yet the reviews consistently highlighted the methodological weaknesses of studies, the broad range of interventions studied and the scant research in children and adolescents compared with adults.

The evidence of intervention effectiveness was less convincing when looking at meta-analytical findings drawn only from randomized controlled trials (RCTs). For example, a meta-analysis of RCTs of psychosocial interventions for refugee and asylum seeker populations found reductions in symptoms of PTSD, depression and anxiety when combining adult and child populations, but did not find clear effects of interventions in children specifically[94]. Another meta-analysis of individual participant data reported an overall positive effect of focused psychosocial interventions for children in humanitarian settings on reductions in PTSD symptoms and functional impairment, with increases in hope, coping and social support[95]. However, no effects were found for depression and anxiety symptoms, and effects were diminished among children who were younger and/or displaced.

Despite the theoretical support for a shift from focusing solely on the individual child to taking a socio-ecological approach to child mental health and well-being and supporting the systems and environments
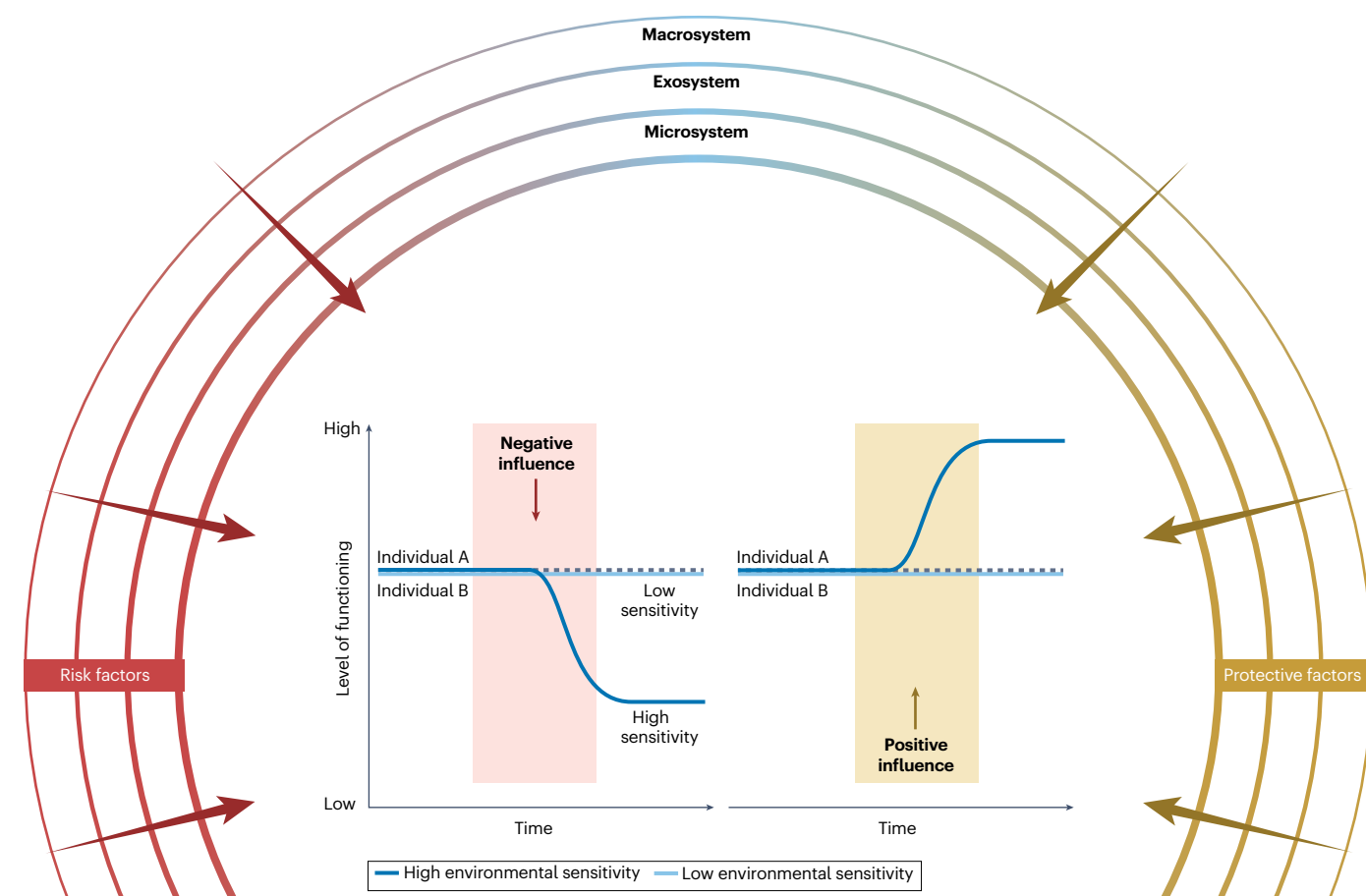

Fig. 1 | Socio-ecological approach to mental health challenges and resilient behaviour in forcibly displaced children. According to ecological systems theory[26], children's mental health and behaviour are influenced by various risk (red) and protective (yellow) factors associated with war, displacement and support that can be categorized across systems levels into macrosystem (the society), exosystem (the community), microsystem (the family or school) and individual (the child's constituent traits). Following theories of environmental sensitivity[72–75], individual differences in sensitivity to environmental influences and exposure to risk and protective factors across systems interact across settings and time. These interactions can manifest in children's behaviours (blue).

Table 3 | Systematic reviews of intervention studies with children exposed to war or forced displacement

Target of interventions	Type and focus of interventions[a]	Population	Number and type of studies included	Review methods	Key effectiveness findings on children	Ref.
Interventions across system levels						
Prevention	Psychological and social interventions for preventing mental health disorders	Adults and children living in LMICs affected by humanitarian crises	7 RCTs, 5 of which included children and/or adolescents	Cochrane review and meta-analysis	No data on effectiveness in reducing incidence No changes in symptoms of PTSD, depression and anxiety	121
Prevention and promotion	Psychosocial support interventions for preventing mental health disorders and promoting well-being	Forcibly displaced adults and children	162 studies (any type), 45 of which included children and adolescents Only 21% of interventions focused on children; 7% on young children	Systematic review and meta-analysis	Moderately improved psychosocial well-being (pooled adults and children effect size=−0.534) Small non-conclusive effects on improved internalizing (pooled adults and children effect size=−0.152) and externalizing problems (pooled adults and children effect size=−0.249) Worsened internalizing symptoms in children (effect size=0.129)	108
				Narrative synthesis of qualitative and quantitative data	Positive perceptions (98%) of intervention effectiveness for most studies Mixed findings from quantitative measurements: 44% showed positive perceptions, but only 29% when considering RCT designs alone	
	Transdiagnostic psychosocial interventions for preventing symptoms and promoting well-being	Forcibly displaced adults and children	36 RCTs identified; 32 RCTs included in meta-analysis, 10 of which included children and/or adolescents	Systematic review and meta-analysis	No evidence of improvement; 44.4% of effect sizes indicated non-significant negative effects	122
Treatment	Psychosocial interventions for mental health problems	Adult and children asylum seekers and refugees	26 RCTs, of which 2 included children	Systematic review and meta-analysis	No subgroup analyses conducted specifically for children and adolescents	94
Prevention, promotion and treatment	Focused psychosocial support interventions targeting individuals with distress[96]	Children exposed to humanitarian crises in LMICs	11 RCTs including children	Systematic review and meta-analysis of individual participant data from 3,143 children	Improved PTSD symptoms (SMD=−0.33) maintained at follow-up 6 weeks or later (SMD=−0.21), particularly among adolescents aged 15–18 years (SMD=−0.43), non-displaced children (SMD=−0.40) and children living in small households (SMD=−0.27); no gender differences Improved functional impairment (SMD=−0.29), coping (SMD=−0.22), hope (SMD=−0.29) and social support (SMD=−0.27)	95
	Any psychological intervention	Youth up to age 24 years impacted by armed conflict in LMICs	28 RCTs and controlled trials	Systematic review with narrative analysis	Improvements reported across studies, although patterns were inconsistent across outcomes and interventions	99
				Component analysis	Interventions demonstrating positive effects commonly included access promotion, psychoeducation for children and parents, insight building, rapport-building techniques, cognitive strategies, use of narratives, exposure techniques and relapse prevention	
	Mental health and psychosocial support interventions to promote psychosocial well-being and/or prevent or treat mental health disorders	Children and adolescents affected by armed conflict in LMICs	24 studies (any type)	Systematic review with narrative synthesis	Improvements reported across all interventions for at least some outcomes Only 43% of interventions improved primary outcomes 22% of interventions worsened at least one outcome	100

Table 3 (continued) | Systematic reviews of intervention studies with children exposed to war or forced displacement

Target of interventions	Type and focus of interventions[a]	Population	Number and type of studies included	Review methods	Key effectiveness findings on children	Ref.
Interventions delivered with the family						
Prevention, promotion and treatment	Family-based mental health interventions	Refugee families in HICs and LMICs	10 studies (pre–post, quasi-experimental and RCTs)	Systematic review and narrative synthesis	Evidence base is still emerging, but interventions showed potential to improve child and caregiver mental health, family processes and functioning	102
		Refugees and immigrants exposed to traumatic events	6 studies (pre–post, quasi-experimental and RCTs) including 4 school-based interventions and 2 multifamily support groups	Systematic review and narrative analysis	Limited research hindered conclusions	101
Interventions delivered in schools and community						
Treatment	School and community-based interventions for reducing psychological disorders	Refugee and asylum-seeking children	21 studies (pre–post, quasi-experimental and RCTs), including 14 in HIC schools ($n=11$) or community ($n=3$) settings and 7 in LMIC refugee camps	Systematic review and narrative analysis	Verbal processing of past experiences ($n=9$), creative art techniques ($n=7$) or a combination of both ($n=5$) improved outcomes (effect size range=0.31–0.93) Interventions using CBT had the largest effect sizes	111

Only systematic reviews that reported interventions' effects were included. Reviews of interventions in low- and middle income countries not focused on humanitarian emergencies and forced displacement were excluded. [a]Descriptions are provided according to terminology as described in the main text. CBT, cognitive behavioural therapy; HICs, high-income countries; LMICs, low- and middle-income countries; PTSD, post-traumatic stress disorder; RCT, randomized controlled trial; SMD, standardized mean difference.

around children[96–98], several reviews found that most interventions for displaced young people focused on individual factors[94,99,100]. Whether delivered to individual children or groups of children (including in a school or community setting), most interventions targeted child-level outcomes (such as depression, anxiety and traumatic stress symptoms) through building the child's individual resources (such as problem-solving strategies and stress management).

The two reviews that focused specifically on family interventions[101,102] found promising potential for such approaches to improve child and caregiver mental health and family processes, yet highlighted limited research to date. Original intervention studies in forced displacement contexts indicated promising effects on child outcomes for behavioural parenting interventions[103], combined support for parenting and parent mental health[104], preventive family interventions[105] and systemic family interventions[106]. However, evidence was largely limited to skills-based promotion and prevention interventions[102,107] rather than covering more focused interventions for families experiencing substantial distress. Although the majority of forcibly displaced families live in LMICs, 60% of intervention studies were conducted in HICs[102] and very few studies were conducted in humanitarian settings.

Interventions were commonly delivered in schools[100,108] — a key part of the child's social ecology[109,110]. However, we identified only one systematic review specifically focused on school-based interventions in humanitarian emergencies or forced displacement[111]. This work reported positive effects for interventions that included verbal processing of past experiences and/or creative art techniques, with the most support reported for interventions that included cognitive behavioural techniques. Nonetheless, empirical evidence so far has been limited and most interventions have been conducted in HICs[111]. Similarly, systematic reviews of school-based interventions conducted in LMICs more broadly have consistently highlighted the limited number of scientific studies to date, the methodological weaknesses of

existing studies and the few examples of successfully scaled-up services[109,112,113]. A cost–benefit analysis of school-based interventions for children and adolescents facing humanitarian emergencies or forced displacement forecast benefit–cost ratios of US $57 and US $225 in benefits per US $1 invested, respectively, for school-based group cognitive behavioural therapy (CBT) prevention programmes for children displaying symptoms of depression and school-based social and emotional learning promotion programmes[114]. This result highlights the interventions' potential and underscores the importance of further research in this area.

Additionally, implementing a mental health and psychosocial support intervention within a school is different from implementing interventions that aim to address the school environment. A realist review conducted in 2022 identified 19 studies of universal prevention programmes in humanitarian education settings in LMICs and developed evidence-informed programme theories that identified factors likely to lead to improved well-being and learning for children. Beyond individual child factors, factors driving change included teacher coping skills and support for students, strengthening interpersonal bonds between caregivers and children, and fostering feelings of security at school[115]. These findings lend support to more comprehensive programmes addressing teachers and the school environment.

Communities can and should play a lead role in their own care after adverse experiences, and should be meaningfully engaged in interventions' programming[116,117]. Community-based approaches not only place communities in the driver's seat in designing and implementing interventions but also leverage community strengths and skills, attend to improving collective well-being, and strengthen collective structures and systems that are integral to well-being and quality of life[118]. These approaches might also reduce stigma around mental health services, which is a commonly reported barrier for accessing support[119,120] (Box 2). However, there is scarce evidence for interventions that work with communities to support child and adolescent

Box 2 | Mental healthcare gap

The 'mental healthcare gap' is the number of individuals requiring mental healthcare but not receiving it. Estimates for depression indicate gaps of up to 67% in high-income countries (HICs) and greater than 90% in low- and middle-income countries (LMICs)[168], with only 1 in 5 people in HICs and 1 in 27 in LMICs receiving minimally adequate care[168,169]. The proposed drivers of this gap include lack of resources, limited access and low demand[170,171].

Lack and inefficient use of resources

Despite mental health conditions being a leading contributor to the global burden of disease and estimated to cost US$2.5 trillion annually[172], countries spend, on average, 2% of their health budget on mental health[173], and this percentage is lowest in LMICs, where the majority of forcibly displaced children live[174]. For comparison, experts call for spending to increase to 5% in LMICs and 10% in HICs at a minimum[175]. Spending on child and adolescent mental health services (as opposed to adult services) is even more limited[19,173]. Of the limited spending, two out of every three dollars fund psychiatric hospitals, with little attention to more accessible community mental health services and prevention and promotion activities[173]. Only 21% of the World Health Organization (WHO) member states — and only 3% among low-income countries — have mental health policies and plans implemented in full compliance with human rights, and even fewer have specific plans for child and adolescent mental health[173].

Furthermore, there are fewer than 1 mental health professional per 100,000 people in low-income countries, compared with more than 60 in HICs[18]. Professionals trained to provide mental health support to children and adolescents specifically are more scarce, with just 3 per 100,000 globally, and as few as 0.1 per 100,000 in low-income countries[173].

One approach to increasing resources is task-sharing, whereby non-specialist providers are trained and supervised by mental health specialists to deliver care[176]. Non-specialist interventions often take a transdiagnostic approach and use core elements found to be effective in psychotherapy (often with fewer sessions than the original psychotherapy guidelines and often in group format[170,177]). This approach has demonstrated safety and efficacy across contexts, including with forcibly displaced children[144], although implementation science research is needed to improve delivery and scale[27,144].

Limited and inequitable access

There are many barriers to accessing interventions, especially for people with lower socio-economic status[171]. Services are commonly delivered face to face in healthcare facilities in urban settings and at times that are suitable for providers but not for users, which makes access challenging, especially for disadvantaged groups[119,170]. Other barriers include insurance and coverage for mental health services, and discrimination[171,178].

Potential solutions include a shift to community-based interventions including integrating mental healthcare into primary healthcare and education, delivering services at times and locations that prioritize users (for example, evenings and weekends), provision of transport or reimbursement of costs and use of digital technology to facilitate remote service delivery[170,178–180].

Limited help-seeking behaviour in mental healthcare

Although efforts to enhance the availability and quality of services are critical in closing the gap, the use of available services is contingent upon individuals' recognition and prioritization of mental health concerns and their willingness to seek help[175,178]. Factors such as stigma, lack of awareness about mental health needs and concerns around quality of care have been cited as barriers to help-seeking[157,171,178]. These factors are typically addressed through efforts to raise awareness, enhance quality of services and promote human rights[34], reduce stigma[181] and implement community-based identification tools[182], and interventions to boost help-seeking[178].

However, the most commonly reported barrier is a lack of perceived need for treatment[183]. Although one interpretation is that further awareness-raising is needed, an alternative is that current services might lack contextual relevance, and failure to address the complex needs of disadvantaged communities might influence acceptability[157]. Active involvement of the population in the co-design of mental health services, avoiding biomedical labels, using relevant explanatory models[129,170] and leveraging individuals' resources, including family and community[170], might ultimately increase uptake[157,170,176].

Moreover, service usage can be limited when populations perceive their distress as inextricably linked to social and economic circumstances rather than as clinical disorders[157]. Displaced populations rarely receive adequate income, housing, employment or education support[173], yet these are known to improve mental health and well-being, and interventions might have limited effectiveness when social and economic conditions are not improved (F.L.B. et al., unpublished work)[157,184]. Social and structural determinants of mental health should be fully recognized and addressed concurrently with mental health and psychosocial support interventions[170,185], with cross-sectoral collaboration and partnership to deliver adequate and meaningful services[97,157].

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mental health and well-being[100,111]. Only one review specifically focused on community-based interventions for refugee and asylum-seeking children, yet the included studies evaluated interventions delivered in community settings that targeted individual-level processes, rather than interventions targeting community environments and interpersonal processes[101]. Another review, focused on children affected by armed conflict in LMICs, highlighted the dearth of evidence on interventions to strengthen communities[87]. The assumption that mental health and psychosocial support programmes can improve outcomes in refugee children in the absence of structural changes in society and in the presence of meaningful ongoing adversity needs to be rigorously tested.

Interventions from promotion to treatment

Experts frequently advocate for a stepped care approach via multi-layered and multisectoral collaboration and coordination to deliver services that progressively become more specialized. These layers can be visualized as a pyramid in which mental health and psychosocial considerations built into basic services and universal preventive interventions for all members of the community sit at the bottom and

broadest level, and progressively fewer people need the services at higher, more specialized service layers[14,97]. Universal services are followed by selective prevention services targeting specific family and community mental health needs, which in turn are followed by indicated prevention services focused on identified mental health risks and conditions, reaching highly specialized clinical management at the top of the pyramid.

Prevention and promotion interventions at the population level are consistently recommended in guidelines, widely implemented and largely reported to have benefits in practice[88,100,108]. However, the three systematic reviews that focused on prevention and promotion interventions[108,121,122] found relatively few studies with forcibly displaced populations, especially for children. One of these systematic reviews, which included a meta-analysis of prevention and promotion interventions in forcibly displaced populations (children and adults combined), found a moderately strong overall effect (effect size = −0.534) on psychosocial well-being, and non-significant small effects on internalizing (effect size = −0.152) and externalizing (effect size = −0.249) problems[108]. However, only 21% of the included research focused on children (and fewer on young children), and a subgroup analysis indicated that children showed worse internalizing symptoms after receiving these services. The other two reviews similarly found no evidence of positive effects of prevention or promotion interventions for children and adolescents[121,122]. Furthermore, most original studies lacked the long-term follow-up assessments that are essential to evaluate the interventions' potential to reduce the incidence of mental disorders[108,121,122]. This finding reflects a persistent evidence–practice gap whereby the most widely implemented interventions have the least evidence[123]. Authors also highlight a lack of coherence between intervention aims and measured outcomes, with a focus on clinical symptoms and a failure to measure other potentially meaningful positive effects on mental health that might have occurred in response to such interventions (such as effects on well-being or quality of life)[100,108].

Interventions across cultures and contexts

The importance of adequate consideration of culture and context in the delivery of mental health and psychosocial support interventions with forcibly displaced communities has been repeatedly highlighted, and cultural adaptations have been demonstrated to relevantly and iteratively improve intervention effectiveness[124–127]. The vast majority of current approaches are from HIC settings with non-displaced populations, yet substantial research indicates that conceptualizations and expressions of psychological distress differ across settings and often do not align with Western diagnostic models[32,128]. Thus, 'off-the-shelf' interventions are not necessarily directly applicable to all communities, might not directly fit local understandings of intrapersonal and interpersonal distress or treatment preferences, and risk doing harm[117,129]. Despite this background, reviews found that few studies adapted interventions to the context and those that did seldom reported substantial modifications[99,100].

When conducted, cultural and contextual adaptation of evidence-based interventions typically aims to strike a balance between 'fidelity' (retaining core intervention components; for example, psychoeducation or relaxation) and 'fit' (ensuring acceptability, comprehensibility, relevance and completeness through changes such as the use of illustrations and relevant local idioms)[130]. Such adaptations should address changes needed to the cultural concepts of distress, the treatment components and the treatment delivery[129], and avoid the assumption that refugees are a homogeneous group (even if they share the same country of origin)[28]. An example of a rigorous contextualization process was a psychological intervention with young adolescents displaced from Syria to Lebanon[131]. This intervention was adapted through a comprehensive process of desk research, qualitative interviews with adolescents and other community members, iterative workshops with local experts and potential end users, and gathering detailed feedback during pilot testing.

Active ingredients and mechanisms of change

Beyond questions of 'what works', the thorough investigation of the interventions' effectiveness entails addressing questions of how, for whom and under what circumstances mental health and psychosocial support interventions work. Such research can help elucidate the specific 'active ingredients' of these intervention packages to identify critical programme components that drive change[27]. For example, one systematic review[99] included an analysis of the treatment components commonly present within manualized intervention packages that had positive effects on young people in LMICs affected by armed conflict. The identified intervention components included psychoeducation, cognitive exposure, relaxation and expressive techniques such as art and dance. The interventions also commonly included strategies to promote accessibility (such as holding sessions in the community), build rapport between providers and young people, encourage practice at home between sessions and maintain treatment gains[99].

Similar component analyses have been conducted for parenting and family interventions[102,107,132]. Findings indicated that strategies used in family interventions for refugee populations commonly included psychoeducation, stress management techniques, positive parenting, communication skills and connection to social supports[102]. These methods provide important insights into the components included in successful intervention packages, but the findings are descriptive only and cannot attribute the effectiveness of interventions to particular components. Further experimental investigation of the unique effects of different components will allow more sophisticated intervention design.

Consideration of the mechanisms of change that explain the pathway between the delivery of the intervention to the observed therapeutic outcomes is also needed to understand 'how' interventions achieve their intended effects. One systematic review of reviews analysed mechanisms of change in 13 reviews of interventions for children and adolescents affected by war and armed conflict (covering 30 countries). Only four mechanisms were supported through high-quality evidence (quantitative data specifically testing the mechanism, such as through mediational analysis). The findings suggested that the effects of interventions on young people's mental health and well-being might be achieved via increased caregiver capacity to support their children, strengthened family relationships, enhanced problem-solving skills and enhanced therapeutic rapport with a counsellor. These findings highlight the importance of interventions addressing family environments to effectively change child outcomes. However, further systematic measurement and delineation of the dynamic and complex mechanisms that lead to optimal intervention outcomes for children is still needed. Developing theories of change that link intervention components with intended intermediate and long-term outcomes can help to hypothesize and test these pathways (Box 3).

Among displaced children, different risk and protective factors and intervention needs are at play depending on developmental stage, gender and disability (among other factors), and therefore it is essential to consider which interventions work for which subpopulations

# Review article

Box 3 | Theory of change

A theory of change is a detailed description of how and why a desired change is expected to take place in a particular context[186]. A well-designed theory of change can help researchers to understand the mechanisms by which the specific components of an intervention lead to desired outcomes. Furthermore, it can improve programme evaluations by identifying what outcomes should be measured, including hypothesized mediators.

Designing a theory of change entails mapping out the 'missing middle' or 'black box' that links intervention activities to the desired long-term outcomes. The process typically starts by identifying the challenges to be addressed, specifying the desired long-term outcomes of a given intervention, and then working backwards to identify the intermediate outcomes and the conditions that must be achieved to reach the long-term aims. The process of developing a theory of change also brings stakeholders together, which promotes discussion and collaboration when developing intervention activities, selecting outcome measures, and ensuring that priorities and expectations are aligned.

An example of a theory of change is provided in the figure. The goal in this example was to develop a mental health and psychosocial support intervention targeting the family system in Iraqi and Syrian refugee families and host Jordanian families.

Several collaborative workshops were held with researchers, practitioners from an international non-governmental organization, a community-based organization, community advisory boards, and global and regional experts. The description of the status quo (see the figure, pink) included the most pressing current psychosocial challenges facing families identified through the qualitative work and local consultation. Next, the long-term outcomes to be achieved were identified, as were the relationships among them (see the figure, orange). This step also included the specification of a 'line of accountability' with the potential impacts that could occur after the long-term outcomes were achieved (see the figure, blue). Stakeholders then identified the intermediate outcomes (see the figure, purple) that were essential to move towards these outcomes. This step enabled specific intervention components to be identified and developed into what was called the 'Nurturing Families Intervention'.

In this example, having a clear theory of change ensured that the intervention components perceived to be the most important drivers of change could be prioritized and measured during implementation. A pilot evaluation of the intervention found support for potential benefits of the 'Nurturing Families Intervention' and helped to identify potential mediating factors for achieving long-term outcomes[29].
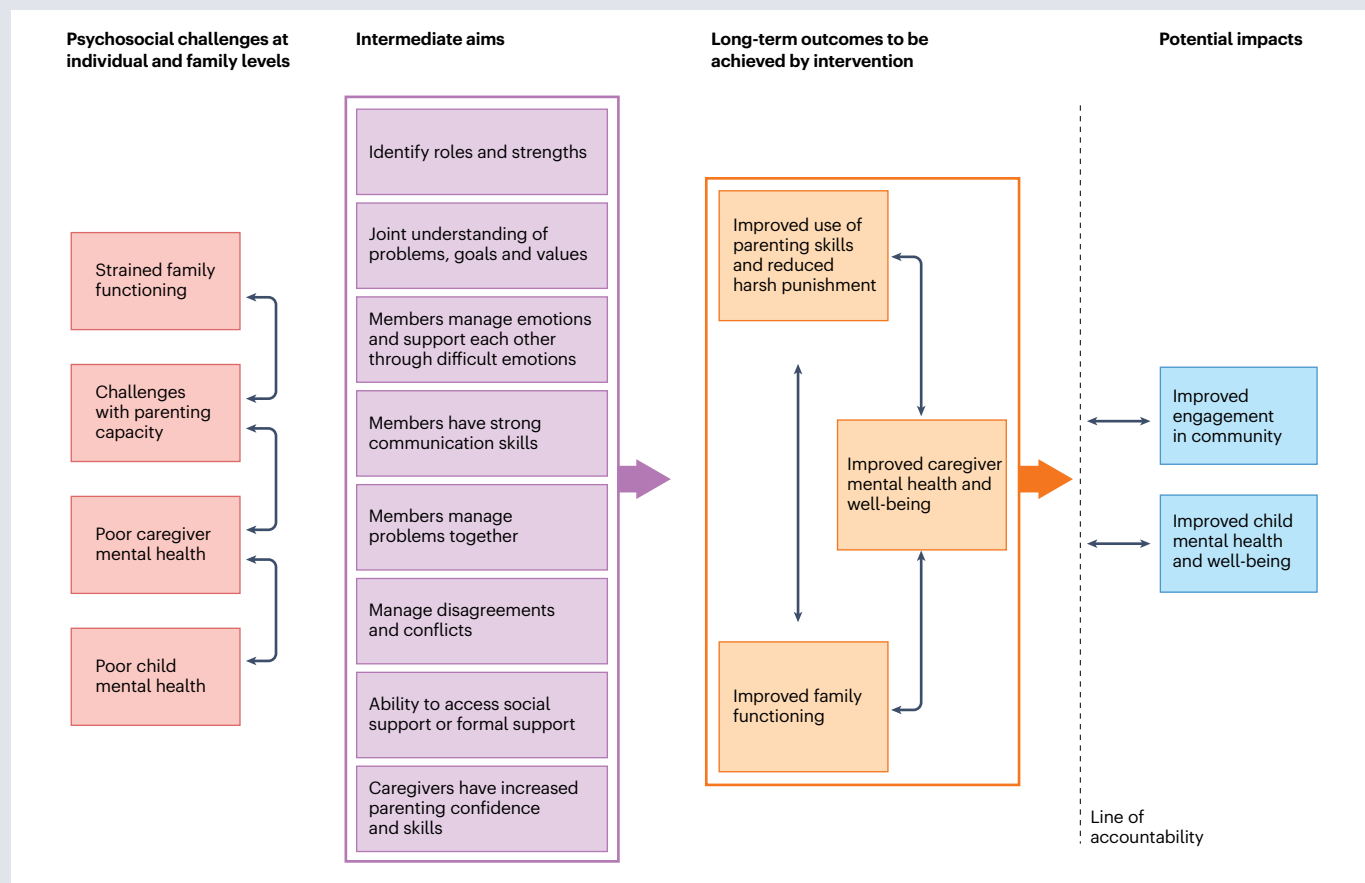
('for whom'). Stratified analyses or calculations of moderation effects are increasingly conducted in RCTs to assess participant characteristics that might predict better or worse responses to treatment. However, findings remain mixed across population characteristics and outcomes of interest and do not enable strong conclusions to be drawn. For example, four RCTs have been conducted using the same classroom-based intervention for children in various settings. This classroom-based intervention integrates CBT techniques with cooperative play and creative-expressive exercises (drama, dance and music) in a structured curriculum consisting of 15 sessions to be delivered over 5 weeks by trained non-specialists. The intervention was associated with reductions in psychological problems and aggression among boys only in Nepal[133], reductions in PTSD symptoms among girls only in Indonesia[134], and reductions in conduct problems and PTSD and anxiety symptoms among boys only in Sri Lanka[135]. In Burundi, there were effects on depression symptoms and functional impairment only among children in larger households[136]. Meta-analyses that combine individual participant data across studies are needed to better understand specific subgroup effects[95] and reach clear recommendations for policy and practice. In addition, evaluation studies often exclude children with pre-existing health conditions, developmental delays or disabilities, or unaccompanied minors[28], and therefore concerted efforts must be made to determine intervention options for these subgroups.

Finally, implementation research efforts have focused on understanding how to ensure programme gains in real-life contexts outside tightly controlled research trials. Three indicators of quality implementation have been proposed as essential to achieve impact[137]: provider adherence (to what extent providers retain fidelity to intervention manuals), provider competence (to what extent providers demonstrate core skills in intervention delivery) and participant attendance at sessions. However, to date these indicators are not systematically measured or reported in published studies or practice, particularly provider competence because measuring this indicator requires more nuanced measurement strategies. In an effort to support organizations in assessing and strengthening competency of non-specialists working with children and adolescents, the World Health Organization (WHO)–UNICEF Ensuring Quality in Psychological Care platform has been developed. Tools to assess core provider competencies have been validated in several sites[138,139], and a proof-of-concept study has demonstrated superior outcomes of competency-based training compared with training as usual[140]. Beyond the quality of implementation, there are some indications that the intervention format, such as the inclusion of booster sessions[29,141,142] (additional sessions delivered several months after main content) and whether delivered individually or in a group[119], might affect feasibility and impact. However, further implementation research, including high-quality process evaluations that can tease apart the complex role of contextual factors on intervention delivery and outcomes, is still needed[143,144].

In sum, although promising progress has been made on expanding the evidence base for mental health and psychosocial support interventions for forcibly displaced children, the gap between the empirical evidence and existing guidelines and practice is particularly stark. The evidence quality was limited by small sample sizes, inadequate consideration of the impact of the control condition in individual trials and meta-analyses, self-report measures rather than clinical assessments or observational tools, and the use of measurement tools based on Western constructs of mental health and validated in non-displaced samples in HICs. Although the current evidence base does not enable clear conclusions about which types of interventions work, for which outcomes and for which children, the findings indicate that attention must be paid to broader family, community, school and systemic factors to improve mental health outcomes for forcibly displaced children and adolescents. Sophisticated methods that identify the active ingredients of interventions, how interventions exert their effects, for which populations and under what conditions will be essential to effectively tailor efforts, improve quality and ensure equity.

Summary and future directions

Our Review synthesizes evidence towards the effective support of children's mental health in contexts of forced displacement. The literature suggests heterogeneous trajectories leading to mental health risk and resilience, over time and across diverse settings and individuals. A multisectoral and multilayered model of developmentally relevant mental health and psychosocial support services, grounded in a socio-ecological approach and tailored to address both risk and resilience factors, is recommended in global guidelines and frameworks[96,98,145]. However, there has been only limited implementation of this principle in practice, and research in this area has substantial shortcomings that hinder effective policy formulation and programme delivery. We highlight key recommendations to guide future empirical research, effective interventions and theoretical framing.

High-quality studies must be designed to enable a deeper understanding of bio-developmental and socio-ecological pathways that promote mental health and to generate actionable insights for concrete strategies. Prospective, longitudinal studies are essential: cross-sectional research cannot clarify how poor mental health can be improved over the life-course[19,34], and cannot accurately identify the mechanisms that shape positive and negative outcomes[7,11]. A shift from cross-sectional to longitudinal, mixed-methods studies will enable a more precise understanding of risk and protective factors at different stages of displacement[146] and help to identify causal mechanisms linked to prevention, promotion and care[25]. Relatedly, prospective examination of relationships between caregiver and child mental health can shed light on the intergenerational aspects of mental health and resilience (as shown by studies in Jordan[55,60]) and help the development of evidence-informed family-system interventions (as done in Lebanon[106]). Future studies should also expand beyond unidimensional examinations of mental disorders such as anxiety, depression and PTSD to encompass a broader spectrum of psychosocial outcomes, including social and emotional learning, emotion regulation, social cohesion, protection and well-being[147]. Furthermore, advancing interdisciplinary research that bridges psychosocial and socio-ecological perspectives with physiological and genomic approaches is critical in order to understand the biological pathways that underlie the impact of forced displacement[70,148–150].

Our Review describes several compelling examples of effective interventions that support displaced children and their families. Indeed, mental health and psychosocial support initiatives have been increasingly recognized as integral components of national development strategies in some governments, including in war-affected contexts[151]. They are also a fundamental priority for achieving the sustainable development goals. In May 2024, the World Health Assembly adopted a resolution calling on all member states to integrate mental health and psychosocial support into emergency preparedness and response frameworks[152]. However, the evidence base on effective interventions for forcibly displaced young people remains limited. There is a particular gap in research examining interventions that extend beyond individual-level approaches to address the broader socio-ecological

Box 4 | Recommendations for mental health research on forcibly displaced children drawn from existing systematic reviews

Available guidelines state that mental health and psychosocial support interventions should be made routinely available in all settings[14]. However, there is a need for more rigorous research designs that provide evidence for interventions working with parents, families and communities.

Target population
- Strengthen the evidence base on interventions for displaced and refugee children and adolescents, especially younger children.
- Further studies are needed in low- and middle-income countries (LMICs) and humanitarian settings.

Measures and assessment
- Include indicators of non-clinical outcomes along with indicators of distress and clinical outcomes, in particular when assessing the effectiveness of prevention and promotion interventions.
- Match the stated aim of the intervention (for example, reduce symptoms) and measured outcomes (for example, clinical outcomes).
- Include longer-term follow-ups to assess outcomes trajectories.
- Develop larger controlled trials to provide more conclusive evidence of effectiveness.
- Measure family-level processes such as parenting, and parent–child relationships.
- Measure school-related variables such as educational attendance and attainment, future aspirations of individuals and the overall school climate to determine the impact of school-based services.

Scaling up interventions
- Enhance processes and reporting of cultural adaptations of interventions.
- Tailor interventions to specific populations.

- Develop clear theories of change to guide intervention development and evaluation.
- Develop further studies of prevention interventions with long-term follow-up.
- Develop further studies of interventions delivered in schools and communities.
- Develop further studies on family-based interventions for forcibly displaced children, including and family-based mental health treatment (versus prevention) and whole-family (versus parent-only) approaches.
- Develop strategies to engage fathers, retain whole families in services.
- Conduct further studies into effective methods to build workforces.

Research analysis
- Individual participant meta-analyses are needed to clarify differences across subgroups (more effective than under-powered post-hoc analysis of randomized controlled trials (RCTs)).
- Identify specific intervention components that lead to impact, and specify which components are universally effective versus context-dependent.
- Increase attention to mechanisms of change, and moderators of effectiveness.

Unexpected challenges
- Be aware of potential negative effects of mental health and psychosocial support interventions. Interventions might undermine the natural recovery of some children.
- There are ethical and pragmatic obstacles to conducting RCTs in small communities with limited access to mental healthcare.

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context in which refugee children are embedded. This gap is even more pronounced in acute humanitarian settings, where the evidence base pertaining to child mental health and psychosocial support interventions is even more limited than in non-humanitarian settings in LMICs[88] and HICs[108,153], despite the increased rates of psychological distress in these contexts. More efforts are required to understand how to effectively promote positive mental health and prevent mental health conditions[108,115], including studies assessing non-clinical outcomes, and longer-term intervention effectiveness.

There is a need to further integrate systems thinking into mental health and psychosocial support, moving beyond reactive, deficit-based models to proactive, well-being-centred approaches[66,85]. Specifically, comprehensive strategies that support children and their families, engage state organizations and mobilize community networks are essential for enhancing access to education, legal protection and socio-economic opportunities — all of which support long-term gains in child and adolescent mental health and well-being[154]. These resource-focused and strengths-based intervention models envisage mental healthcare as part of an interconnected system rather than a stand-alone service[55], extending socio-ecological models to focus attention on the drivers of change, or determinants of mental health, in complex ecosystems.

Achieving systemic, real-world impact raises several questions, including how to ensure equitable access to mental health services, how to promote sustained uptake and long-term care, and how to scale interventions effectively while maintaining quality and cultural relevance. Given the high burden of mental health conditions, particularly among forcibly displaced populations, sustainable funding mechanisms are imperative. With limited numbers of mental health professionals in many settings, researchers must consider how best to train and equip non-specialist workforces to safely and effectively deliver services. Similarly, rigorous implementation research is needed to evaluate multisectoral, multilayered delivery models, including stepped care models. Mental health prevention and promotion approaches (rather than treatment), despite being widely implemented, have historically been under-researched, and therefore more research is needed to understand their impact.

A sophisticated and nuanced approach to community-level adaptation requires active engagement with local partners[30,155–157]. Effective adaptation relies on strong, reciprocal partnerships that facilitate knowledge translation[130] and leverage existing strengths and resources[128,130,131]. In settings characterized by population mobility and socio-cultural diversity, adaptation of interventions requires specific

guidance for care providers based on reliable evidence about which 'active ingredients' of a care package must be retained. Collaborative partnerships also require ensuring ownership for the next generation of clinicians, community-based workers and policymakers to lead and sustain mental health and psychosocial support efforts[158]. All acting parts should ensure that services fit the lived realities of displaced populations, featuring systems that help children flourish over the long term[66,159].

Funding agencies have encouraged scholars to report the evidence for effective interventions in humanitarian crises in clear language, and to provide concrete examples of good practice, ethical engagement and commitments to local partnerships[155,156]. For their part, scholars have highlighted their profound responsibility to address ethical challenges, share relevant study protocols, and partner with local institutions and communities[27,70,155] when working with forcibly displaced communities. To enhance accountability, funders and researchers should prioritize intervention models that ensure equitable access, uptake and sustained feasibility[160]. Relevant examples of mental health and psychosocial support initiatives championed by governmental, international and local institutions that are culturally relevant and operationally embedded in local systems can be found in the Inter-Agency Standing Committee coordination handbook[21] or the WHO's Building Back Better[22].

The number of forcibly displaced children is growing, yet access to essential mental health services remains critically inadequate. A stronger, science-driven vision for mental health and psychosocial support — one that prioritizes child and adolescent mental health within the broader humanitarian response — is needed to bolster resources for children, families and communities and support pathways to positive mental health and well-being[129,157] (Box 4).

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