

Interventions for adolescents in crises contexts: what works and what are the key research gaps?

Working paper

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Overview

Adolescence is a critical developmental period marked by profound changes, as individuals navigate their transition from childhood to adulthood. It is often seen as a time when young people develop some independence from their close familial networks, to unearth new relationships, opportunities and experiences in their wider environment (Viner et al., 2015). However, for many young people growing up in the context of crises, this is not the case, and instead they experience adolescence as a time when their opportunities diminish in the face of external constraints (Wringe et al., 2019; van Blerk et al., 2022). Adding greater complexity to this picture are prevailing discriminatory gender and social norms that can place young women and girls in subordinate positions, limiting their access to social resources such as peer networks, education and decision-making, further increasing the impacts of crises (Rashid and Michaud, 2000; le Masson et al., 2019; Murphy et al., 2019; Wringe et al., 2019).

This rapid literature review explores the current evidence on interventions targeting adolescents (defined here as aged 10–19 years), and youth¹ (20–25 years) in crisis contexts, paying particular attention to outcomes for adolescent girls. Due to time and resource constraints, this review draws on findings from systematic and narrative reviews, both from the academic and grey literature (see below for methodological details). The review includes interventions that target boys and girls, as the majority of the literature focuses on both; however, we focus on gendered differences when looking at the impacts of the interventions and the extent to which the evidence base is gender-disaggregated.

Following an initial scoping review to ascertain which sectors interventions targeting adolescents are predominantly clustered in, we focus on three key areas: mental health and psychosocial well-being, gender-based violence, and education. This is also aligned with the broader literature, which highlights that adolescent girls are likely to be at risk of disruptions to their education, sexual and gender-based violence, and adverse mental health outcomes in crisis-affected contexts (Malala Fund, 2021; Devonald et al., 2022b; Presler-Marshall et al., 2024a).

We have defined crises as both acute and protracted events that are caused by conflict, climate-related hazards or other significant disruptors, which impact communities and make it more challenging for individuals to navigate daily life, and which often require humanitarian assistance. We include interventions that support young people during and post-crisis, as well as those that support young people living in environments characterised by protracted displacement.

¹ We included youth due to the often significant overlap between age bands defined as adolescents and youth.

Impacts of crisis on adolescent capabilities

Before presenting findings on the impacts of interventions designed to mitigate the effects of crises on adolescent capability outcomes, we first provide a very brief overview of the current research landscape on the impact pathways on adolescents' mental health, experiences of gender-based violence, and access to education and learning outcomes. For each capability outcome domain, we begin with a general overview for adolescent populations, before focusing on the specific effects on adolescent girls.

Mental health

Crises have been shown to have significant impacts on young people's mental health. The World Health Organization (WHO) estimates that around 22% of people in conflict-affected areas suffer from mental health disorders, with 9% having moderate-to-severe mental health issues at any point in time (Charlson et al., 2019). Children and adolescents are more likely to develop mental health problems in the context of conflict and war (Hamilton et al., 2016; Brown et al., 2017b; Papola et al., 2020). They often face direct implications of crises such as exposure to severe stressors, including experiencing or witnessing violence, destruction, and loss of life, which can have consequences for mental health disorders such as post-traumatic stress disorder (PTSD) and anxiety. A systematic review from 2012 showed rates of PTSD among children and adolescents as between 5% and 8% in Israel, between 23% and 70% in Palestine, and between 10% and 30% in Iraq, with adolescents at greater risk of experiencing traumatic events than younger children (Dimitry, 2012). Other documented adolescent mental health issues resulting from war are depression, anxiety, and externalising or internalising behaviours (Bosqui and Marshoud, 2018). Young refugees are also at risk of mental health disorders, due to a breakdown in social networks, losing family members, and experiences of violence (Hassan et al., 2016; Khan et al., 2019; Jones et al., 2021). Young people can also face indirect consequences, such as disruptions to routine life (such as interacting with friends and pursuing hobbies) and essential services such as schools and health care, higher household insecurity (including a lack of food, water, and sufficient shelter) and diminished opportunities in the face of external constraints (Devonald et al., 2020; UNICEF, 2023).

Climate-related disasters often have similar multidimensional impacts on adolescent lives, including distress migration, and the disruption of schooling and a sense of normality (Bezu et al., 2020; Devonald et al., 2022b; Presler-Marshall et al., 2024a). These types of experiences cause serious stress among young people and, if not treated adequately, can have lasting effects far into adulthood (Cerna-Turoff et al., 2021; UNICEF, 2023). As a result, climate-related disasters can take a toll on the mental well-being of adolescents in low- and middle-income countries (LMICs), causing high levels of PTSD and depression (Devonald et al., 2020; Sharpe and Davison, 2022; Proulx et al., 2024). For example, in Afar, Ethiopia, where families are extremely reliant on the weather conditions for household income, adolescents reported serious worries for their future and economic stability in light of a changing climate (Devonald et al., 2020). In Tanzania, young people who face severe water insecurity and climate change distress were more likely to report being depressed than those who did not (23 percentage points and 19 percentage points respectively) (Prencipe et al., 2023).

Evidence suggests that adolescent girls in a variety of contexts (including LMICs) have worse levels of mental health (on average) than boys (Campbell et al., 2021); however, the literature on the gender dimension of adolescent mental health in humanitarian contexts is limited. The sparse research that does exist highlights large gender differences in mental health outcomes in crises and post-crises

settings. A study of young people in post-conflict Cambodia found that girls were more likely to experience anxiety and depression, somatic complaints, social problems, internalising syndrome, and were more likely to report having attempted suicide, whereas boys were more likely to plan suicide attempts and exhibit rule-breaking behaviour (Jegannathan et al., 2011). A study of community violence exposure in post-conflict Indonesia found that the perceived impacts of violence were linked to mental health problems among girls, who also reported higher levels of emotional problems, while boys faced higher rates of violence (Fausiah et al., 2019). Syrian refugee young women in Jordan were also found to have higher levels of depression compared with their male peers (Presler-Marshall et al., 2024b).

Gender-based violence

Girls' experiences of gender-based violence can also be impacted by crisis. More than one-third of women and girls worldwide experience gender-based violence, and in humanitarian settings, the risk of such violence increases significantly. It is estimated that 70% of women and girls experience gender-based violence during times of crises (OCHA, 2021). In particular contexts, due to their social isolation, girls are often invisible to humanitarian responders and are overlooked in relief efforts (Noble et al., 2019). Adolescent girls are particularly vulnerable to gender-based violence because they are at an age of social, emotional and physical transition, making them more susceptible to different forms of abuse (Yount et al., 2017). They can face high rates of sexual violence and intimate partner violence in conflict settings (Murphy et al., 2019). Gender-based violence can have physical and mental health impacts, leading to child marriage, which can lead to further experiences of gender-based violence that can have detrimental effects on girls' lives beyond the initial crisis (Stark et al., 2022).

In humanitarian contexts, girls often lose protective structures such as family, school and social networks that provide a first line of defence for adolescents against different forms of abuse (including gender-based violence) (OCHA, 2021; Meinhardt et al., 2022). Pre-existing risks for gender-based violence (such as economic stress, substance abuse among men, inequitable gender roles, limited decision-making power, limited knowledge on sexual and reproductive health, and lack of access to community or institutional services) are often exacerbated due to armed conflict or natural disasters (Noble et al., 2019; Stark et al., 2022; Murphy et al., 2023).

The evidence on the connection between disasters and gender-based violence appears to be stronger for armed conflict than for climate-related hazards, even though the drivers are similar (Cerna-Turoff et al., 2019; Stark et al., 2022; van Daalen et al., 2022). Some studies suggest that increased distances to water sources during drought can put girls at risk of sexual harassment, or violence from parents and husbands if they take longer than usual to collect water (Devonald et al., 2020). In humanitarian contexts, the most prevalent forms of gender-based violence against adolescent girls are intimate partner violence, domestic violence, sexual violence (rape and sexual abuse), and child marriage. However, evidence on the connection between child/forced marriage and disasters is limited (Neal et al., 2016; Stark et al., 2022; Murphy et al., 2023). Some studies do suggest a correlation between early marriage and conflict; for example, more lenient family laws towards child marriage in Bangladesh (compared with Myanmar) are linked to the low average age at first marriage (15.7 years) among the Rohingya in refugee camps, as in Rohingya culture, girls are considered eligible for marriage after reaching menarche (the first menstrual cycle) (Islam et al., 2021). This highlights that some forms of gender-based violence are context-dependent and often relate to already existing norms and laws in the community.

As girls have often been overlooked in humanitarian efforts, the vulnerabilities and needs of girls during crises are not well researched. However, there has been progress in recent years, as shown by increased donor funding and the provision of tailored programmes for adolescent girls by prominent aid organisations (Noble et al., 2019). The evidence base for what works for girls in humanitarian settings is therefore growing; however, research during crises remains a challenge.

Education

An estimated 222 million children in humanitarian settings are in need of education (Education Cannot Wait, 2022). Since the 1990s, education has been included as a key element of humanitarian response, as aid organisations expanded their scope to promote a wider range of needs (and not just fulfil basic needs such as food and shelter) required for the development of children and adolescents (Burde et al., 2017).

Educational infrastructure is often destroyed during conflict and sometimes becomes a strategic location for armed groups and/or a specific target because of its affiliation with the state or a hostile ideology (Lai and Thyne, 2007). Since the 2023 war in Gaza, all universities and more than 80% of the schools have been destroyed or severely damaged due to Israeli bombing. In addition, 261 teachers and 95 university professors have been killed (Education Cannot Wait, 2022; United Nations Office of the High Commissioner for Human Rights (OHCHR), 2024). Civil wars also impact overall enrolment and government spending on education (Lai and Thyne, 2007). In both Yemen and Syria, around 1 in 5 school-aged children and young people remain out of school (UNICEF, 2021; United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2022); and in Sudan, a year since the outbreak of the civil war, many children and adolescents have not yet been able to return to school (UNESCO, 2024). Evidence from Ethiopia, which is still in the aftermath of a civil war, shows negative effects of the conflict on young people's aspirations and students' motivation for learning and performance (Jones et al., 2022).

Increasingly, climate disasters impact adolescents' education, especially in fragile areas where states are not able to offer adequate responses (Burde et al., 2017). Climate-related hazards can disrupt access to schooling by destroying schools, impeding routes to school, and driving teachers and students to migrate (Cadag et al., 2017; Devonald et al., 2020; Presler-Marshall et al., 2024a).

The gendered disparities that girls face in education often become heightened during crises. For example, climate-induced crises such as drought can increase the domestic workload for girls who have to travel further distances to collect water, with implications for school access and time spent studying (Malala Fund, 2021; Devonald et al., 2022b; Presler-Marshall et al., 2024a). During conflict, whereas boys are more likely to be enlisted in armed groups or have to contribute to household income (Rodríguez and Sánchez, 2012; Buvinić et al., 2013; Swee, 2015), girls' education can be affected by gender norms as armed groups (for example, the Taliban in Afghanistan) target girls' schools (Khan, 2015). Child marriage can also be viewed as a protective factor during times of crises, which can often result in girls leaving school (Wringe et al., 2019; Presler-Marshall et al., 2020). Still, it can be difficult to draw robust conclusions about the evidence on girls' and boys' school attendance during crises because a comparison with peace time attendance is often missing (Burde et al., 2017).

Methodology

This review focuses on systematic, rapid and literature reviews of interventions targeting adolescents in crisis settings in low-and middle-income countries. We defined adolescents as aged 10–19 years and youth as aged 20–25 years. During an initial scoping review, mental health and psychosocial well-being, gender-based violence, and education were highlighted as key sectors which are significantly impacted by crises and were therefore selected as the main outcomes of the interventions included in the review.

We searched the following terms in a range of databases:

Google Scholar:

- *"Humanitarian setting" intervention "systematic review" adolescent*
- *intervention "systematic review" adolescent conflict OR "climate change" OR war OR crisis OR drought OR flood*
- *adolescent intervention review disaster OR drought OR flood OR fire OR "climate change" "mental health"*
- *adolescent intervention review disaster OR drought OR flood OR fire OR "climate change" "gender-based violence"*
- *adolescent intervention "systematic review" war OR conflict OR crisis OR humanitarian OR displacement "mental health"*
- *school-based intervention humanitarian "mental health" "systematic review"*
- *school-based intervention humanitarian "gender-based violence" "systematic review"*
- *intervention "low middle-income" "systematic review" adolescent "climate change" OR "climate crisis" OR "global warming" OR "flood" OR "fire"*
- *emergency review intervention school OR education*
- *enrolment intervention review conflict OR "climate change" OR war OR crisis OR drought OR flood OR disaster OR humanitarian*
- *school intervention review conflict OR "climate change" OR war OR crisis OR drought OR flood OR disaster OR humanitarian*
- *education intervention review conflict OR "climate change" OR war OR crisis OR drought OR flood OR disaster OR humanitarian*
- *enrolment intervention review conflict OR "climate change" OR war OR crisis OR drought OR flood OR disaster OR humanitarian OR emergency*

Pubmed/Cochrane Library/Scopus/PsycINFO/Scopus/PILOTS/MEDLINE/Web of Science/EMBASE

- *"mental health" OR "gender based violence" OR "GBV" OR education AND adolescent OR "young people" OR youth AND intervention OR programme AND "systematic review" AND humanitarian OR conflict OR disaster OR climate change OR drought OR flood OR "crisis" OR war*
-

Grey literature

- *Google; Reliefweb; AGIP; Care International; Catholic Relief Services; Danish Refugee Council; Department for International Development; International Rescue Committee; International Center for Research on Women; Mercy Corps; Nike Foundation; Norwegian Refugee Council; Population Council; UNICEF; Innocenti; United States Agency for International Development; World Bank; World Health Organization; Women's Refugee Commission; iied; ODI; IDS; Plan International*

We selected the resulting 24 papers based on the following criteria:

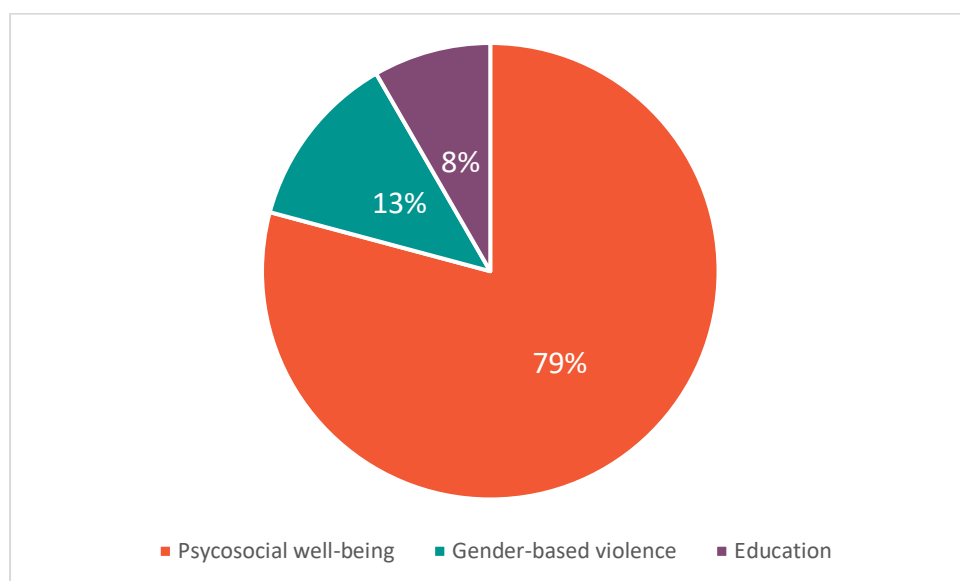
- systematic, rapid or literature review
- an evaluation of intervention or programme
- intervention includes adolescents (aged 10–19) as beneficiaries
- interventions focused on mental health, gender-based violence and/ or education
- interventions set in low- and middle-income countries (LMICs) (we included reviews that included studies in high-income countries only if they made up less than 50% of the studies included)
- the intervention was targeted towards those in crises settings (climate, conflict, displacement) and aims to address crisis impacts
- published from 2014 onwards.

Crisis settings were defined as those relating to internal or external displacement, armed conflict (both current and post-conflict) and climate-related disasters. We also excluded any systematic reviews not specifically focused on adolescents. However, we did include some reviews that focused on both women and girls (within the gender-based violence interventions), due to limited research on this topic. The studies were hand-searched for gender, which was not part of the search terms in order to avoid overlooking any studies. Studies that fitted our framework but did not focus on gender were also included.

Review findings

This review of reviews includes 24 studies that focus on interventions designed to mitigate the education, mental health or gender-based violence risks faced by adolescent girls and boys in crisis-affected contexts. Most of the studies reviewed were focused on mental health interventions (19), with only three reviews on gender-based violence interventions and only two reviews on interventions targeting education in crises settings (See Figure 1). One study (Corley et al., 2022) included data on each of the three domains. Below we outline the top-level findings of these reviews, identifying cross-cutting themes on the opportunities and gaps within the evidence base of adolescent-targeted interventions in crises settings.

Figure 1: Overview of studies included in the review



Mental health

Overview of evidence base

We identified 19 reviews of evidence on the impacts of mental health interventions for young people in crises settings (Kamali et al., 2020). The majority of these reviews focus on quantitative, peer-reviewed studies, and on mental health disorders such as PTSD and depression; there are limited studies on well-being, resilience and quality of life (Giles et al., 2024). There was also a lack of research addressing wider topics linked to psychosocial well-being such as alcohol or drug misuse (Kamali et al., 2020).

Intervention types and characteristics

A wide range of interventions were employed to tackle mental health issues among adolescents in humanitarian settings. In our search, the most commonly reported intervention is cognitive behavioural therapy (CBT), which usually focuses on changing certain thought and behavioural patterns. The treatment has proven to be an effective therapy, mainly against depression and anxiety (including among youth) (O'Connor and Creswell, 2008; American Psychological Association (APA), 2017). Other treatments cited include eye movement desensitisation and reprocessing (EMDR), KIDNET (a specific type of narrative exposure therapy often used to treat refugees experiencing PTSD),

and other types of trauma-focused therapy. Kamali et al. (2020) also noted that creative and arts therapy were much more likely to be used in interventions targeting young people.

Most interventions were set in schools or community centres and delivered in group settings, while individual sessions were limited. Non-specialists or paraprofessionals (teachers, volunteers, staff working for non-governmental organisations (NGOs)) were the most common facilitators of interventions; a limited number of interventions were conducted by specialists. The duration of the interventions varied greatly between a few sessions and several years. One review that included 36 studies estimated the average duration of an intervention to be 130 days (Brown et al., 2017a).

Intervention outcomes

In general, **many of the reviews highlight that interventions show promising positive effects on young people's mental health across a range of mental health outcomes** (Morina et al., 2017; Nocon et al., 2017; Bosqui and Marshoud, 2018; Alzaghouli et al., 2022; Brown et al., 2017a;b; Bangpan et al., 2024). Newman et al. (2014) found large impacts for psychosocial interventions on PTSD symptoms among young people where those interventions used EMDR, exposure therapy and CBT. Morina et al. (2017) found large positive effects of psychological interventions on PTSD symptoms among young people but smaller effects on depression, with interventions focused on memories of the traumatic experiences being the most successful.

Large heterogeneity was found within studies (Hamilton et al., 2016; Brown et al., 2017a; Nocon et al., 2017; Kamali et al., 2020) and many studies had poor-quality scientific reporting (Morina et al., 2017; Kamali et al., 2020). **Some interventions were found to cause unintended adverse effects** and sometimes increased symptoms, especially those that were not trauma-focused (Jordans et al., 2016; Alzaghouli et al., 2022; Bosqui and Marshoud 2018; Bangpan et al., 2024). For example, Hamilton et al. (2016) found no evidence of effectiveness of sports and physical activity programmes for adolescents in post-conflict settings, with some studies showing a decline in young people's mental health. **More research is also needed into the long-term impacts of these interventions**, as some studies found that the intervention effect decreased at 6 weeks or later follow-up (Purgato et al., 2018; Pfefferbaum et al., 2020), but in general there was a lack of research on this topic (Brown et al., 2017b; Alzaghouli et al., 2022; Bangpan et al., 2024).

The inclusion of parents and caregivers within interventions appears to be beneficial, with family-focused interventions having positive impacts on young people's internalising and externalising symptoms (Corley et al., 2022), and interventions addressing PTSD having higher effects when they include parents (although interventions without parents were still effective) (Newman et al., 2014). However, in general, there is **a lack of studies on community-based and family-focused interventions**, despite the prominence of these types of interventions in the field (Jordans et al., 2016; Kamali et al., 2020), highlighting the need for more evidence on this topic.

Several studies show that interventions with fewer sessions are still effective in improving young people's mental health (Newman et al., 2014; Brown et al., 2017a; Pfefferbaum et al., 2020; Alzaghouli et al., 2022), which is particularly useful in low-resource and crises settings, and suggests that fewer sessions could provide a low-cost but effective practice. Newman et al.'s (2014) review additionally highlights the importance of early intervention, with interventions within four months of the trauma being the most effective in treating PTSD symptoms among young people.

A high number of interventions were delivered in schools, and many found positive effects and can offer familiar settings (Fu and Underwood, 2015; Kamali et al., 2020; Bosqui and Marshoud 2018;

Mattingly, 2014). However, in contrast, Newman et al. (2014) found greater effects for interventions in health or mental health settings compared with schools. Similarly, studies showed **contradictory evidence on group versus individual interventions**. Interventions were shown to be effective in group settings (Pfefferbaum et al., 2020) whereas Newman et al. (2014) found higher effects for individual treatment compared with group interventions. The evidence on the most effective type of facilitators is also inconclusive. Whereas Nocon et al. (2017) found that the limited interventions that showed promising effects for refugee and internally displaced young people were provided with trained non-clinicians such as teachers, Newman et al.'s (2014) review of young survivors of climate-related or manmade disasters found higher effects for interventions with specialised mental health professionals rather than teachers or other school personnel. **More research is needed to understand effective modalities of interventions**, and particularly interventions in non-school settings, in order to reach out-of-school adolescents (Noble et al., 2019).

Despite evidence showing the positive impact of psychosocial interventions for young people in crises, there is a lack of good-quality evidence on the types of interventions that best support refugee or displaced young people. Nocon et al. (2017) found **limited high-quality evidence on the impact of psychosocial interventions for refugee or internally displaced young people**, with high levels of heterogeneity (with even CBT interventions showing only moderate effect size). Giles et al. (2024) also find no significant effects of prevention and health promotion interventions for displaced adolescents for randomised controlled trials (RCTs) and generally a lack of good-quality evidence but a small non-significant trend for depression. Purgato et al. (2018) also found lower levels of improvement in PTSD symptoms for displaced young people, compared with their non-displaced peers, suggesting that interventions need to be adapted for this specific population group, and **greater attention is needed on 'what works' for refugee youth**.

There is also a lack of studies looking at the impact of interventions on preventing mental health disorders, and more studies on prevention are needed (Papola et al., 2020) in addition to **understanding the mechanisms and processes** through which interventions cause change (Hamilton et al., 2016; Pfefferbaum et al., 2020; Bosqui and Marshoud, 2018). However, Lasater et al. (2022) found that for children (aged 6–12 years),² mechanisms for improved psychosocial outcomes for school-based interventions include building coping skills, emotional regulation and interpersonal relationships.

A number of promising practices have been identified, in particular, the importance of adapting the interventions to cultural contexts (Jordans et al., 2016; Alzaghouli et al., 2022). For example, a review of family-focused interventions for young adolescents found that **adapting these interventions to cultural norms and the specific context of conflict was an important component** (Corley et al., 2022). Furthermore, Kamali et al. (2020) found benefits in interventions using local community facilitators, integrating networks into pre-existing networks, and adapting the interventions to the context. Despite this, Jordans et al. (2016) found that **only 40% of interventions in their review reported cultural modifications**, and very few gave detailed overviews on what adaptations were made.

Other key elements of positive psychosocial interventions in crises settings include: having the intervention in an **easily accessible place or with transportation access**; psychoeducation for young people and their caregivers (including understanding common reactions to trauma); insight building

² Although this age range is wider than the focus of this study, we included this review as it explored the specific mechanisms for improved psychosocial outcomes among young people.

(supporting young people to have better self-understanding); building stronger relationships; cognitive and narrative strategies; and focusing on relapse prevention strategies (Brown et al., 2017b).

Gender-specific findings

Evidence for age- and gender-sensitive interventions is very limited, and/or reviews do not interpret the data when gender-disaggregated results are discussed. Giles et al. (2024) report **stronger improvements in depressive symptoms among younger and female participants**. They suggest that this could relate to a higher acceptability of the programmes among girls and younger participants. However, it could also relate to the fact that refugee girls report higher levels of depression than refugee boys (ibid.).

Jordans et al. (2016) found **variability in the impacts of interventions for boys and girls depending on context and intervention type**. For example, a school-based mental health intervention for war-affected young people in Sri Lanka found larger effects for boys compared with girls on PTSD symptoms, whereas a school-based mental health intervention for young people impacted by political violence in Indonesia showed larger effects for girls. Additionally, in Uganda, an RCT of an Interpersonal Psychotherapy Group (IPT-G) intervention for depression for internally displaced war-affected adolescents (aged 14–17) found greatest effects for girls (who had no abduction history), but for males with no abduction history the intervention had negative impacts.

Lasater et al. (2022) highlight differences in outcomes in some interventions for boys and girls. A psychosocial intervention for war-affected Palestinian children showed that a teaching recovery techniques (TRT) intervention reduced loneliness within relationships with peers for boys, but for girls it reduced sibling rivalry. A study in Brown et al.'s (2017a) review, exploring the impact of a school-based psychosocial intervention in conflict-affected regions of rural Nepal, found no overall effect of the intervention; but it found positive impacts on boys' overall mental health and aggression, and for pro-sociality for girls.

Some of the reviews included gender as a moderator but did not find any effect or no differences between genders (Brown et al., 2017a; Purgato et al., 2018). **Many other reviews do not mention gender at all** (Fu and Underwood, 2015; Morina et al., 2017; Kamali et al., 2020; Pfefferbaum et al., 2020; Bosqui and Marshoud, 2018).

Gender-based violence

Overview of evidence base

There was limited evidence on interventions addressing gender-based violence for adolescents girls in crises settings. We identified three reviews focused on gender-based violence interventions, all of which highlight a **lack of literature on this topic and the poor quality of the data available** (Noble et al., 2019; Stark et al., 2022). Most studies reviewed lacked a control group or used mixed methods. Two studies focused mainly on adolescents (one review also included a study that looked at both women and girls), while another review looked at girls and women together (majority women). The age of adolescent girls differed, and both younger and older adolescents were included. Evidence covers humanitarian programmes in a wide range of LMICs (the majority in sub-Saharan Africa), and most data was collected in refugee camps and post-conflict settings.

Intervention types and characteristics

Safe spaces for girls was the most common intervention type. They provided a range of activities for girls, including livelihoods skills, financial literacy, access to safety nets, prevention of gender-based violence, and/or reproductive health, while other interventions also included parent/guardian meetings. One review looked at caregiver and family-focused interventions in conflict-affected regions (Corley et al., 2022).

Intervention outcomes

A review of studies on women and girls' safe spaces found no reductions in exposure to or incidence of violence for participants, but improvements in psychosocial well-being and social support for girls (Stark et al., 2022). Empowerment approaches to reduce gender-based violence also found mixed results, with some studies showing positive improvements in positive financial activities (such as saving and borrowing), increasing access to social assets (such as friends and mentors), and increased decision-making power, whereas others showed no impact (or negative impacts) on access to financial assets and tracking finances (Noble et al., 2019). A review of caregiver and family-focused interventions for young adolescents in conflict-affected regions identified one study that showed improvements (i.e. reductions) in violence within the family, but two studies found no differences in experience of sexual violence in the previous 12 months (Corley et al., 2022). A review of the links between social support and gender-based violence found that certain forms of social support are beneficial in terms of mental health impacts for those who had experienced gender-based violence, **with community levels of intervention (such as peer networks) being particularly valuable** (Meinhart et al., 2022). Stark et al. (2022) also identified that the effectiveness of referral systems was impacted by complex networks of interventions, poor coordination and extensive turnover among personnel. **More research is also needed into the pathways and mechanisms that lead to positive outcomes** (Meinhart et al., 2022; Stark et al., 2022).

Education

Overview of evidence base

Despite evidence on the impact of crises on young people's education (Malala Fund, 2021; Devonald et al., 2022b; Presler-Marshall et al., 2024a), only two reviews were identified on education interventions, and they both highlight a significant lack of good-quality evidence on interventions targeting education for young people in crises settings (Burde et al., 2015; 2017). Both studies by Burde et al. looked at armed conflicts and climate-related disasters in LMICs, but also include studies from non-crisis settings.

Intervention types and characteristics

Burde et al. (2015) recognises several interventions that include: reducing distance of travel to school; community monitoring; community participation; retro-fitting existing school structures; material support; double shifts; distance learning; and cash transfers. Other interventions focused more on content and learning, accelerated learning programmes, and vocational and life skills training and information sessions, both before and after a crisis (Burde et al., 2015). Corley et al. (2022) reviewed family-focused interventions in conflict-affected countries (including economic and social empowerment programming) and found a number of studies that reported positive improvements in school attendance and enrolment, although these were less frequently measured outcomes.

Intervention outcomes

The strongest evidence identified is on the impact of community-based education for improving both access to education and learning outcomes. This type of schooling reduces the distance children need to travel to school and is also less of a target for armed groups because they are often located in a home or mosque (Burde et al., 2015; 2017). Although there was limited discussion on climate-related interventions, one observational study in Bangladesh found that the implementation of information sessions, workshops, and contingency planning and preparedness in more than 1,000 flood-prone schools was effective in supporting children to stay in school during climate-related hazards (Akram et al., 2012, in Burde et al., 2015).

There is an evidence gap on **what works when expanding education to large numbers of refugee young people**, including limited evidence on commonly used methods such as double-shift systems or building schools within refugee camps (Burde et al., 2015). There were limited studies on the link between education and mental health. Many focus on how education can improve mental health in these settings, but not on **how psychosocial interventions can improve learning outcomes** (Burde et al., 2017). Yet, CBT interventions were shown to improve learning outcomes and educational outcomes, while reduced mental health symptoms (PTSD and depression) were shown to improve interest in schools (Burde et al., 2017).

Gender-specific findings

Girls especially benefited from community-based schools. Evidence from post-conflict Afghanistan showed that enrolment levels reached more than two-thirds of those eligible for school – an increase from 27% – after a community school instalment, while girls saw an increase of 15 percentage points compared with boys and showed greater improvements in test scores (Burde et al., 2017). There is also emerging evidence on the benefits of providing female teachers and girl-only schools. Again, in Afghanistan, girls’ enrolment increased by 30% as more female teachers were employed, and in Pakistan, girls’ schools in villages improved enrolment rates (Burde et al., 2015; 2017). However, evidence also suggests that if male teachers were well known in the community, it is not a significant deterrent for girls’ education (Burde et al., 2015).

Attention to intersectionality

There is a growing literature that highlights that adolescents with intersecting inequalities are uniquely impacted by crises, and evidence is needed to understand how to ensure inclusive responses (Carter, 2022; Baird et al., 2021; Jones et al., 2021), but **young people’s intersectional experiences were largely ignored** in the reviews included in this paper.

There is also limited attention to disability and data on adolescents is rarely disaggregated by disability (Devonald et al., 2022a; Guglielmi et al., 2021; Guglielmi et al., 2022). The only reviews that mention disability highlight the fact that **most studies do not pay attention to different impacts depending on a young person’s disability status** (Burde et al., 2015; Bangpan et al., 2024). This constitutes a significant research gap, especially considering the high numbers of people with injuries and conflict-acquired disabilities in crises contexts, as well as the greater vulnerabilities that young people with pre-existing disabilities face when crises occur (Handicap International, 2015; Rohwerder, 2017).

There is also limited age-disaggregation in the studies. Some studies highlighted differences in effectiveness of interventions based on age. For example, a psychosocial intervention for children in humanitarian settings had greater impacts on PTSD symptoms for older children (15–18 years) compared with younger children, but more research is needed to explore the reasons behind these differences (Purgato et al., 2018). By contrast, Giles et al. (2024) found larger effects of interventions

on depression symptoms for young people under the age of 12. Other studies found no moderating effect for age, often due to small sample sizes (Hamilton et al., 2016; Brown et al., 2017a; Alzaghouli et al., 2022). These contrasting effects highlight the **need for greater exploration of the age-specific differences of interventions** on mental health, especially using large sample sizes. Furthermore, young people were rarely consulted in terms of the intervention design (Jordans et al., 2016).

Key research gaps

A number of key research gaps were identified across the themes, and in addition to the critical gaps in terms of the lack of intersectionally disaggregated data discussed above. In general, there was **a lack of studies on the long-term impacts of interventions** (Brown et al., 2017b; Burde et al., 2017; Alzaghouli et al., 2022; Stark et al., 2022; Bangpan et al., 2024). In the majority of the reviews, most of the studies were cross-sectional or only assessed impacts as the programme ended or shortly after (Meinhart et al., 2015; Noble et al., 2019; Stark et al., 2022). For those that did include follow-up, this ranged from 1 month to 12 months after completion of the intervention; however, studies with a 12-month follow-up were rare (for example, Bangpan et al., 2024).

Most of the reviews were cross-regional, with the highest number of studies in sub-Saharan Africa. One review highlighted that there was a lack of good-quality research on psychosocial interventions in the Middle East (Alzaghouli et al., 2022). However, in most other reviews, there were a high number of studies in the Middle East (Brown et al., 2017a; Bangpan et al., 2024). In general, there were limited studies from South America. The majority of studies also focused on conflict-affected contexts, both current conflict and post-conflict, with fewer studies on refugees (Burde et al., 2015; Brown et al., 2017; Nocon et al., 2017) and there **was a lack of studies that explored interventions that address the impacts of climate-related hazards**. For example, Burde et al. (2015) highlighted the lack of studies on education-related interventions in disaster settings. A few psychosocial studies focused on both conflict and natural disaster³ (Newman et al., 2014; Fu and Underwood, 2015; Brown et al., 2017b), but they did not pay attention to the differences by type of crisis. **There were no studies that explored slow-onset climate-related hazards** such as drought. A review of 25 studies on mental health and psychosocial support (MHPSS) interventions in humanitarian settings also found that none of the studies mentioned climate change or considered it within the programme design (Devonald et al., 2022a).

³ Two studies were identified that focused on young people in post-natural disasters (Mutch et al., 2014; Galvan et al., 2021). However, these were not included in the review as they mainly focused on high-income countries. But they underscore the lack of literature on this topic for LMICs.

Conclusions

Overall, we found limited evidence on the impact of interventions on adolescents in crisis settings, and especially on adolescent girls. The evidence base focused predominantly on interventions to tackle adverse mental health outcomes; there is much more limited evidence on interventions in crisis settings aimed at mitigating gender-based violence and education disruptions. The gender-specific impacts of mental health and education programmes were largely absent from the literature, and much more evidence is needed on the differential impacts of interventions on boys and girls (Burde et al., 2015; Bangpan et al., 2024). There was also no consensus as to whether interventions were especially effective in mitigating risks for girls (Giles et al., 2024) versus boys (Jordans et al., 2016). More gender-disaggregated research is therefore needed to understand which interventions are most effective for girls in these settings.

We found a number of additional research gaps, including a lack of research on adolescents with disabilities, and a lack of good-quality evidence on interventions targeting adolescents from refugee and forcibly displaced communities. As some reviews found that mental health interventions are less effective with refugees or displaced adolescents (Nocon et al., 2017), it is again important to understand how these interventions can be tailored more effectively for this population.

Evidence on the impact of climate-related hazards, and in particular slow-onset climate crises, is significantly lacking. Given the anticipated acceleration and intensification of climate-related disasters, there is an urgent need to invest in strengthening the evidence base on what works for adolescent girls. There is also a need for more longitudinal research that looks at the long-term impacts of interventions in crisis settings, not least because some of the studies in the review highlight a reduction of intervention effects shortly after the intervention ended (Purgato et al., 2018; Pfefferbaum et al., 2020).

The review did however identify a number of important promising practices that should be further incorporated into future programming investments. These included: community-based education and community-focused gender-based violence interventions, harnessing peer networks, adapting interventions to the local context, the inclusion of caregivers to reinforce key messages and supportive networks, and investing in targeted outreach to ensure inclusion of the most disadvantaged adolescent girls.

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