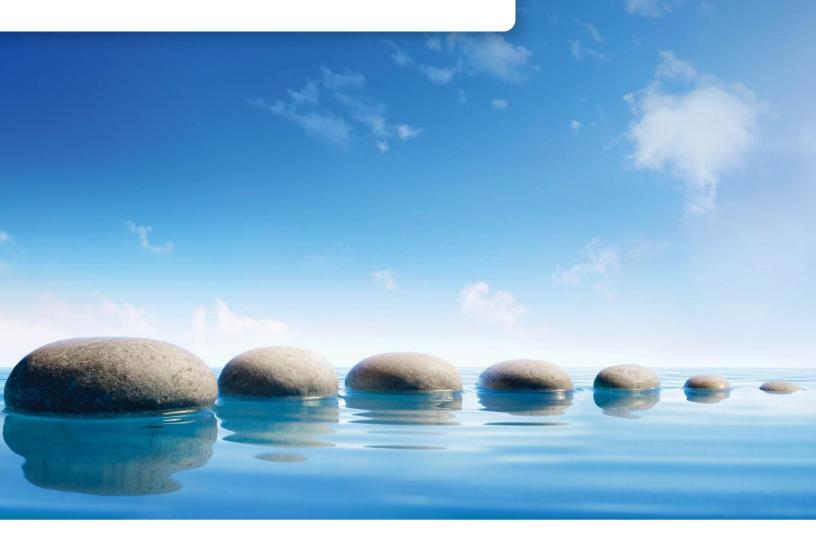
Improving Access to Evidence-Based Interventions for Trauma-Exposed Adults in Low-And Middle-Income Countries





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Executive summary

In low- and middle-income countries (LMICs), the mental health consequences of trauma exposure pose a substantial personal, societal, and economic burden. Yet, the significant need for evidence-based mental health treatment remains largely unmet. To unlock the potential for mental health care for trauma survivors in lower-resource contexts, it is critical to recognize obstacles to receiving treatment and identify strategies to improve access to evidence-supported interventions.

Multiple treatment barriers prevent help-seeking for individuals living with trauma-related mental health difficulties in LMICs. These include attitudinal barriers (such as a low perceived need for treatment, stigma, and a lack of confidence in the effectiveness of treatment) and resource-related barriers (such as a scarcity of mental health specialists, prohibitive treatment costs, and an absence of nearby services). There is an urgent need for effective strategies to reduce these barriers. This briefing paper highlights several innovative, evidence-based approaches that can be harnessed to better meet the treatment needs of trauma-exposed adults in lower-resource settings. These include training a cadre of non-specialist mental health providers from local communities, developing culturally informed and co-developed access and intervention strategies, the use of digital technology to deliver scalable public health messaging and mental health intervention, and the delivery of programs that address a range of trauma-related mental and behavioral health difficulties.

Based on existing evidence regarding treatment barriers and strategies to address these, key recommendations for improving access to evidence-based mental health interventions for adult survivors of trauma in LMICs are as follows. More detailed recommendations spanning public health and policy, research, and practice, are located at the end of the document.

Public health and policy

- In LMICs that currently have, or are planning to implement, national health insurance schemes, treatment coverage for PTSD and other trauma-related disorders should be included.
- Mental health literacy and stigma reduction programs should be implemented to address
 attitudinal barriers to help-seeking. These should draw on contextually responsive
 research with local populations and be co-delivered by community members with lived
 experience of traumatic stress.
- LMICs should invest in the development of a cadre of accredited and adequately compensated community health workers to provide psychoeducation programs and trauma interventions, using sustainable training and supervision models.

Researchers

- Research on improving access to evidence-based trauma interventions in LMICs should be led or co-led by researchers in LMICs, to ensure contextually and culturally relevant research approaches and findings.
- Cultural adaptations of evidence-based trauma interventions should be developed in specific LMIC settings with the involvement of local experts and community navigators, as well as individuals with lived experience of traumatic stress. Culturally congruent outcome measures should be included when evaluating these interventions.
- Research in LMICs should extend beyond evaluating the effectiveness of interventions and include evaluation of implementation and dissemination within the existing community and health systems of the country/region.

Trauma practitioners / service providers

- Culturally congruent, evidence-based assessment tools should be used to inform treatment decisions and monitor treatment progress.
- There are empirically supported diagnosis-specific and multi-problem interventions for traumatic stress in LMICs. When selecting amongst these, interventions that have been culturally adapted for the specific LMIC settings where practitioners are based are likely to be most acceptable and effective for recipients.



1. Introduction

Over two-thirds of adults living in low- and middle-income countries (LMICs) have experienced a traumatic event at least once in their lifetime (Koenen et al. (2017). Such experiences can have profound consequences for the individual and their wider community, including through the increased risk of mental health difficulties, such as posttraumatic stress disorder (PTSD) and depression (Purgato et al., 2018). Whilst the World Health Organization's World Mental Health Surveys of 26 countries found lifetime prevalence of posttraumatic stress disorder (PTSD) in trauma-exposed adults was higher in high-income countries (HICs; 6.9%) than in upper-middle (3.9%) and low- or lower- middle-income countries (3.0%) (Koenen et al., 2017), these findings may not convey the full extent of traumatization in lower-resource settings. Indeed, most LMICs were not included in these surveys. Findings from systematic reviews indicate that a substantial proportion of the population in LMICs suffer from PTSD and depression. For example, the pooled prevalence of PTSD in Sub-Saharan African countries is 22% (Ng et al., 2020). In countries that have experienced war and conflict, which are predominantly LMICs, the aggregate prevalence of PTSD and depression is 29% and 24%, respectively (Lim et al., 2022). Beyond PTSD and depression, trauma survivors in LMICs often present with forms of trauma-related distress that are not consistent with Northern/Western psychiatric diagnoses, but rather reflect local 'cultural scripts' (Chentsova-Dutton & Maercker, 2019). These may include somatic symptoms, impacts on spirituality, and loss of social status (Kohrt et al., 2010; Michalopoulos et al., 2020).

Although the need for mental health services is high amongst trauma survivors in LMICs, the vast majority do not enjoy the universal right to mental health care espoused by the World Health Organization (WHO, 2022). This is due to a range of barriers at various stages in the help-seeking process (Stein et al., 2023; Thornicroft et al., 2018). The economic costs of this unmet mental health need are substantial. Due to a combination of disability and premature mortality, PTSD and depression in LMICs account for over 2,000 and 40,000 lost healthy life years, respectively (Mathers et al., 2006). Increasing access to effective treatments for trauma-related mental health difficulties is critical for meeting the human rights of trauma survivors and reducing the disease burden in LMIC contexts.

This briefing paper describes the treatment gap facing adults with traumatic stress in LMICs and identifies the obstacles that drive this gap, including attitudinal and structural barriers to engaging in care. We also identify a range of empirically supported strategies for enhancing access to effective treatment for this population, including task-sharing, use of culturally adapted and multi-



problem interventions, and digital tools to scale access to care. Finally, we offer recommendations for policy makers, researchers, and service providers that can guide an agenda for action to close the treatment gap for trauma survivors in LMICs.

2. Current access to treatment in LMICs

There is a growing evidence base supporting the effectiveness of psychological interventions to address trauma-related mental health difficulties in lower-resource settings (Morina et al., 2017; Singla et al., 2017). Despite this, access to treatment in LMICs lags far behind in comparison to HICs. Although there is some variation across different countries, overall, only 20% of adults living with PTSD in LMICs have had contact with a mental health specialist or a general medical provider in the past year, compared with 51% in HICs (Stein et al., 2023). Even when considering a broader range of treatment providers (including counselors, spiritual advisors, herbalists, acupuncturists, and other healing professionals), treatment access in LMICs is still significantly lower than HICs for both lifetime (14% vs. 47%) and 12-month PTSD (25% vs. 59%) (Thornicroft et al., 2018). While more severe PTSD symptoms are associated with better treatment access in HICs, this is not the case in LMICs, where even trauma survivors living with severe symptoms often do not receive any form of treatment (Thornicroft et al., 2018). Access to quality evidence-informed intervention is even more scarce. In LMICs, only 5% of adults with PTSD who have had contact with a specialist or general medical provider receive adequate psychotherapy, and only 18% receive any form of effective treatment, while in HICs these figures are 21% and 41%, respectively (Stein et al., 2023). Increasing treatment access without improving the quality of available treatments will do little to address the burden of traumatic stress in lower resource countries. There is limited data on treatment access for trauma survivors with mental health difficulties other than PTSD, but there are likely to be unmet treatment needs amongst these survivors also (for example, those with trauma-related depression). Given the extent of the treatment gap for traumarelated mental ill-health, there is an urgent need to identify and address barriers to accessing quality, evidence-based trauma treatment in LMIC contexts.



3. Treatment barriers in LMICs

According to data from 22 countries in the World Mental Health Surveys, there are three common treatment barriers for trauma survivors with PTSD: a low perceived need for treatment (for example, individuals do not think that they need help or believe that their symptoms are not sufficiently distressing to warrant treatment), a range of other attitudinal barriers (for example, individuals believe that the problem will get better on its own, prefer to handle the problem on their own, lack confidence in the effectiveness of treatment, or are concerned about being stigmatized by others) and structural barriers related to treatment resources (for example, the unavailability of mental health specialists and nearby services, lack of transport to attend distant services, and the costs of treatment) (Thornicroft et al., 2018). Table 1 summarizes the prevalence of each barrier, according to country income level and severity of PTSD symptoms. In low- and lower-middle-income countries the most common treatment barrier across all levels of PTSD severity is a low perceived need for treatment, followed by other attitudinal barriers.

Table 1. Barriers to 12-month PTSD treatment in the WHO World Mental Health Surveys, by country income level (adapted from Thornicroft et al., 2018)

Treatment Barrier	High-income countries	Upper middle- income countries	Low- and lower middle-income countries
Low perceived need for			
treatment			
Severe PTSD	43%	35%	58%
Mild/moderate PTSD	63%	62%	76%
Attitudinal barriers			
Severe PTSD	55%	59%	39%
Mild/moderate PTSD	36%	33%	22%
Structural barriers			
Severe PTSD	28%	51%	26%
Mild/moderate PTSD	7%	15%	8%

It is notable that even in the most resource-constrained regions of the world, individuals with PTSD more commonly report treatment barriers linked to perceptions and attitudes than structural



factors. A crucial first step towards increasing treatment access for trauma-affected individuals in LMICs is, therefore, to improve public awareness and mental health literacy regarding the impact of trauma, and to address stigmatized attitudes about seeking help for trauma-related mental health difficulties.

The second step towards improving access to quality trauma interventions in LMICs is to remove structural treatment barriers, so that trauma survivors can act upon new understandings of their symptoms and how to find help. Having any form of health insurance is an important predictor of treatment access for adults with PTSD in LMICs (Stein et al., 2023). While a variety of health insurance schemes have been implemented in LMICs in recent years (Osei Afriyie et al., 2022), two-thirds of low-income countries do not include mental health as part of national health insurance (WHO, 2022). Addressing this exclusion is an important step towards closing the treatment gap in LMICs. However, increasing mental health coverage for trauma survivors in lower-resource contexts is not a matter of improved health insurance alone; it also requires innovative methods of service delivery that can enhance access to acceptable, affordable, and empirically supported trauma treatment (WHO, 2022).

4. Improving access to evidence-based trauma interventions in LMICs

According to the International Society for Traumatic Stress Studies treatment guidelines (Bisson et al., 2020), there are several interventions for adult PTSD that are supported by strong or adequate empirical evidence. These include Cognitive Processing Therapy, Prolonged Exposure, Eye Movement Desensitization and Reprocessing, Cognitive Therapy, Present-Centered Therapy, Narrative Exposure Therapy, and trauma-focused CBT for individuals or groups. Several of these share core elements to some degree, such as psychoeducation, processing of traumatic memories, cognitive restructuring of unhelpful trauma-related beliefs, addressing avoidance of traumatic reminders, and emotion regulation skills (Schnyder et al., 2015). These treatment protocols were largely developed in HICs and most of the empirical evidence to support them has been obtained through randomized clinical trials conducted in these countries (Riggs et al., 2020; Singla et al., 2017). However, there is now a growing evidence base demonstrating that these interventions can be effectively adapted for LMICs, using a combination of strategies to reduce attitudinal treatment barriers and circumvent structural constraints.

4.1. Task-sharing: a global mental health initiative

It is estimated that in lower-resource countries there are as few as two mental health specialists per 100,000 population, compared with more than 70 in high-income countries (WHO, 2017). Training and supervising non-specialist providers to deliver basic mental health tasks can substantially improve access to, and dissemination of, mental health treatment (Patel, 2009; WHO, 2022). Within this task-sharing approach, non-specialist providers can include community health workers selected specifically to deliver only these services, or existing primary health care staff, such as nurses (Mutamba & Kumar, 2022).

Task-sharing initiatives have the potential to substantially increase the size of the mental health workforce in LMICs, especially in under-serviced rural areas (Hoeft et al., 2017). In addition, the use of community health workers can address attitudinal barriers to treatment, such as stigma, as trauma-affected individuals can access support from culturally accepted community members instead of from specialists in medical settings that tend to be associated with severe mental illness (Bolton, 2019). Non-specialist providers who are cultural insiders can also play a role in psychoeducation initiatives aimed at addressing low perceived need for treatment and increasing intervention awareness and acceptability within local communities (Kane et al., 2016).

Evidence from randomized controlled trials supports the use of task-shared Narrative Exposure Therapy and, to a lesser extent, other trauma-focused cognitive behavior therapy approaches to treat PTSD, depression and other trauma-related outcomes among forcibly displaced populations originating in LMICs but currently residing either in HICs or refugee camps (Nosè et al., 2017; Tribe et al., 2017). There is less research on task-shared trauma interventions in general populations of adult resident in LMICs, for whom treatment access must be integrated into everyday community life or routine health settings. However, existing evidence is promising. For example, Cognitive Processing Therapy delivered by community health workers was effective in treating trauma-related mental health difficulties among survivors of sexual violence in villages in the Democratic Republic of Congo (DRC; Bass et al., 2013) and survivors of systematic violence in rural areas of Kurdistan (Bolton et al., 2014). The effectiveness of Narrative Exposure Therapy to treat PTSD when delivered by community health has been demonstrated in resident adult populations in DRC, Uganda, Burundi, and Sri Lanka (Siehl et al., 2021).

There are several challenges to disseminating task-shared trauma interventions on a large scale in LMICs. For example, staff in primary health care settings already have onerous workloads, and there is high turnover among community health workers due to a lack of accreditation, job security, and adequate pay (Bolton, 2019). In addition, non-specialist providers need adequate training



and supervision to ensure they deliver interventions with adequate skill and fidelity (Petersen et al., 2014). It is not yet clear how the effectiveness of evidence-based trauma interventions delivered by non-specialists compares with that of interventions delivered by mental health specialists. Research that directly compares the outcomes of trauma interventions delivered by different cadres of providers in LMICs can inform decisions about the amount and type of support needed to bring non-specialist providers to optimal competence.

Developing local trainers and supervisors can ensure there is a sustainable capacity to grow new cadres of non-specialist providers in LMICs going forward (Murray et al., 2011). However, inperson supervision by a trained expert still represents a bottleneck in scaling the implementation of interventions, due to a shortage of skilled providers in LMICs and sustainability challenges once research funding for projects discontinues (Fairburn & Patel, 2017). Newer models for scaling supervision, such as training non-specialist providers to peer-deliver supervision through measurement-based models with user-friendly digital platforms, represent an innovative approach to tackle this bottleneck (Singla et al., 2020).

Moving forward, researchers need to focus on evaluating feasible models of scaling up task-shared trauma interventions in routine health and community settings, to meaningfully increase the number of people with trauma-related difficulties who can access treatment (Bolton et al., 2019). Implementation science, which aims to bridge the 'know-do' gap, offers valuable theories and methods to enhance the uptake of task-shared mental health treatments in health and community settings in LMICs (Bauer & Kirschner, 2020; Le et al., 2022), taking into account contextual needs and conditions (Nilsen & Bernhardsson, 2019).

4.2. Cultural adaptation

Understandings of what constitutes trauma, the presentation of post-traumatic reactions, the definition of what constitutes psychopathology, and norms about help-seeking all vary immensely across cultural settings (Chentsova-Dutton & Maercker, 2019; Grupp et al., 2019; Hinton & Bui, 2019; Kohrt et al., 2010; Meili & Maercker, 2019). Strategies to improve access to evidence-based treatment for trauma-related mental health difficulties in LMICs should, therefore, be framed by cultural considerations.

First, culturally appropriate strategies are needed to address attitudinal treatment barriers (Na et al., 2016). For example, 'low perceived need for treatment' needs to be carefully unpacked in each LMIC, as such perceptions may differ across cultural contexts (Lewis-Fernández &



Kirmayer, 2019; Thornicroft et al., 2018). Similarly, the content of stigmatized beliefs and attitudes may have specific local nuances. For example, in post-conflict Northern Uganda, ex-combatants with PTSD experience stigmatization due to their previous association with a rebel group (Schneider et al., 2018), while stigma and shame associated with sexual trauma is common amongst women presenting for HIV treatment in South Africa (Watt et al., 2016). Qualitative research that explores trauma survivors' insider knowledge of barriers to help-seeking in local settings can illuminate such cultural and contextual complexities (Byrow et al., 2020). Findings can then inform the content of public awareness programs to address attitudinal treatment barriers. In addition, social contact strategies, whereby individuals with lived experience of traumatic stress share their experiences with others in their community, is an effective and culturally grounded strategy for reducing stigma (Thornicroft et al., 2016; WHO, 2022).

Second, culturally congruent assessment tools are needed for early and accurate detection of trauma survivors who need treatment referral. While the use of DSM or ICD-based psychiatric categories and assessment methods have a role to play in LMICs, these could fail to detect culturally based trauma responses, resulting in lost opportunities for treatment (Michalopoulos et al., 2020; Seedat and Suliman, 2018). The Cambodian Somatic Symptom and Syndrome Inventory (CSSI; Hinton et al., 2013) and the Egyptian Somatic Symptom and Syndrome Inventory (E-SSI; Jalal et al., 2017) are examples of culturally congruent measures of traumatic stress that can enhance accurate detection of individuals who need intervention.

Third, cultural adaptations of evidence-based mental health interventions can enhance treatment acceptability (Padmanathan & de Silva, 2013) and effectiveness (Hall et al., 2016; Smith et al., 2011). These benefits have also been reported for culturally adapted trauma interventions in LMIC settings (Brunnet et al., 2021; Kaysen et al., 2013; Lewis-Fernández et al., 2014). There are several existing frameworks for cultural adaptation of psychotherapy protocols (Bernal et al., 2009; Chu and Leino, 2017; Heim & Kohrt, 2019), which all target aspects related to cultural concepts of distress. Interventions that incorporate culturally compatible explanatory models and culturally acceptable intervention components can reduce stigma and foster treatment engagement. Jalal et al. (2017) provide an example of how cultural sensitivity and linguistic precision was used to develop Culturally Adapted Cognitive Behavior Therapy for the Egyptian population, incorporating Islamic beliefs and rituals to overcome stigmatizing attitudes and enhance willingness to engage in treatment. Where available, culturally congruent assessment tools should be incorporated as outcome measures when evaluating the effectiveness of culturally adapted interventions for traumatic stress in LMICs.



Finally, cultural considerations can inform the identification of suitable non-specialist providers within a task-sharing approach. For example, a popular task-shifting model in Zimbabwe named 'Friendship Bench' trains grandmothers to deliver evidence-based skills to reduce depression (Chibanda et al., 2015). The research team gathered information systematically in the early stages by using theory-of-change mapping with key local stakeholders. Consequently, this program is a standout model which leverages high-status social resources (i.e., elders) in local communities and in partnership communities. Similar approaches could be adopted to identify suitable non-specialist providers for trauma interventions in specific LMIC settings.

Despite the demonstrated benefits of cultural adaptation, a recent review found a striking gap in studies that systematically document cultural adaptation processes in the development of PTSD interventions (Ennis et al., 2020). In particular, there are few studies that go beyond surface-level adaptations (e.g., changes to language and terminology only) to report substantive, deep-level cultural adaptations to the content and delivery of interventions (e.g., modifying explanations to fit with cultural values; adding sessions/techniques; increasing therapist self-disclosure for greater trust) while still preserving the core treatment elements. In addition, none of the reviewed studies included co-design with people with lived experience of traumatic events and/or resulting distress. This represents a missed opportunity to enhance treatment engagement and effectiveness. Comparatively, psychosis care offers examples of involving people with lived experience in both treatment delivery, design, and the research process undergirding these efforts (Sibeoni, 2023; Vojtila et al, 2021). Lessons learned across disease conditions may facilitate improved traumarelated research and practice in LMICs to enhance engagement with care.

4.3. Digital interventions

While there is still a digital divide between HICs and LMICs, use of mobile phones and smartphone apps is rapidly increasing in LMICs and can be leveraged to augment mental health services in several ways (Merchant et al., 2020; WHO, 2022). As access to internet connectivity varies widely across LMIC settings (World Bank, n.d.), digitally delivered trauma support is likely to be more feasible in some settings than others.

First, digital technology can be harnessed to address attitudinal treatment barriers. For example, public anti-stigma campaigns can be delivered on social media to increase reach and impact at the population level (Naslund & Deng, 2021). The effectiveness of such large-scale digital messaging in addressing trauma-related stigma in LMICs should be evaluated. On a more targeted scale, an online intervention using social contact, psychoeducation and cognitive reappraisal of negative mental health beliefs was found to reduce self-stigma and increase help



seeking behaviors amongst refugee men in Australia (Nickerson et al., 2020). This suggests that similar digital strategies may be effective when directed at specific groups of trauma survivors resident in LMIC settings (e.g., women accessing services for gender-based violence, or survivors of natural disasters). The anonymity and asynchronicity of many web-based mental health interventions may also help to bypass the stigma associated with accessing traditional in-person mental health care and provide a more acceptable modality for treatment engagement (Naslund & Deng, 2021).

Beyond addressing attitudinal treatment barriers, digital interventions can play a significant role in addressing structural challenges. For example, non-specialist providers in remote or rural areas can be trained and supervised using digital technologies, increasing treatment access for trauma survivors who live far from formal mental health services (Naslund et al., 2019). Moreover, digital mental health interventions may be far less costly to disseminate at scale than traditional inperson treatment and, even when data costs are taken into account, less costly to access for individuals without health insurance (Muñoz, 2022).

While digitally delivered interventions for depression and anxiety appear to be effective in reducing these conditions in LMIC settings (Kim et al., 2023), there is currently limited research on digital traumatic stress interventions with adults residing in LMICs (Carter et al., 2021). A recent study in Egypt reported on the cultural adaptation and translation of self-managed PTSD Coach Online, an online cognitive behavioral therapy-based intervention for the treatment of PTSD developed in the United States (Ellis & Miller-Graff, 2021). The adaptation was based on the cultural adaptation framework provided by Bernal and colleagues (1995), specifically the modification of treatment protocols amongst eight dimensions: language, persons, metaphors, content, concepts, goals, methods, and context. A pilot randomized control trial demonstrated strong treatment uptake and reductions in PTSD symptoms at the three-month follow-up, although small in magnitude (Miller-Graff et al., 2021). A follow-up qualitative study with the same sample indicated that digital delivery was culturally acceptable, and that the anonymity of online engagement enabled participants who experienced fear or discomfort regarding treatment from a healthcare profession to access support. However, for some, the 'self-help' approach was not sufficient, and a human presence was desired (Ellis et al., 2022). Similarly, a feasibility pilot study of PTSD Coach in South Africa found that both a self-managed, low data-usage mobile app version and a counselor-supported web-based version showed preliminary effectiveness in reducing symptoms of PTSD, but that counselor support added to user satisfaction (Bröcker et al., 2022). These findings suggest that non-specialist providers could play a role in supporting trauma survivors to use digital PTSD interventions.



While these preliminary studies are encouraging, building on this limited evidence base should be an important focus of future research. Moreover, as with in-person interventions, digital interventions for trauma-related difficulties should be adapted to be culturally appropriate. Including individuals living with traumatic stress in the development and design of digital interventions for specific LMICs settings can enhance both treatment acceptability and effectiveness (Ellis & Miller-Graff, 2021).

4.4. Flexible, multi-problem approaches

As discussed above, there is evidence that treatments targeting PTSD symptoms can be effective in LMIC contexts. However, many trauma survivors in LMICs present with a broad array of comorbid disorders or distress symptoms beyond PTSD, including depression (Hoppen et al., 2019) and substance use disorders (Kaysen et al., 2023), and may struggle to engage in and complete trauma-focused treatment when comorbid difficulties are not addressed (Gutner & Pressau, 2019). Other survivors have subclinical symptoms that do not meet the threshold for a full PTSD diagnosis, but may still cause significant distress, impair functioning, and warrant support (McLaughlin et al., 2015). Consequently, interventions that target multiple outcomes across a spectrum of severity may offer added efficiency and effectiveness to mental health service provision (Gutner et al., 2016). Transdiagnostic treatment refers to "interventions specifically designed to be applied to diverse and complex diagnostic presentations with specific guidance on how to address co-occurring diagnoses and apply intervention techniques to address complex symptom presentations" (Gutner and Presseau, 2019, p. 120).

There is growing evidence that transdiagnostic approaches are effective in trauma-affected populations in LMICs. For example, the Common Elements Treatment Approach (Murray et al., 2014), which combines evidence-based treatment components in a flexible manner, has shown significant reductions in multiple mental health outcomes in trauma-exposed LMIC populations when delivered by community health workers (Bolton et al., 2014; Bonilla-Escobar et al., 2018; Weiss et al., 2015). Problem Management Plus (Dawson et al., 2015) and Self-Help Plus (Karyotaki et al., 2021) were developed by the WHO as transdiagnostic, scalable mental health interventions that can be delivered by non-specialist providers. Problem Management Plus has been found to effectively address a range of outcomes (including distress, depression, anxiety, and PTSD symptoms) in LMIC samples living in contexts of conflict, violence and adversity (Bryant et al., 2017; Rahman et al., 2016; Schäfer et al., 2023). There is preliminary evidence from studies with refugees in LMICs that Self-Help Plus can improve depression symptoms and well-being over time, particularly for more vulnerable individuals (Karyotaki et al., 2023).



Addressing a range of mental health difficulties within a single intervention can save time in busy, under-resourced public health settings and reduce the likelihood of repeat visits for untreated comorbidities. In addition, transdiagnostic approaches allow for simplified, cost-efficient training of non-specialist providers compared with developing competencies in several diagnosis-specific protocols, offer flexibility in treatment delivery, and can be readily adapted across contexts (Guttner & Pressau, 2019). Transdiagnostic approaches therefore have the potential for greater reach and sustainability in contexts with limited financial and human resources for the delivery of trauma interventions.

Beyond treating comorbid mental health difficulties, some transdiagnostic interventions also aim to reduce risk for other public health issues that commonly affect trauma-exposed populations. NETfacts, which has been trialed in DRC, combines individual Narrative Exposure Therapy with community-based groups that collectively process common trauma experiences, and has been found to reduce mental health symptoms as well as myths about, and stigma towards, sexual violence (Robjant et al., 2022). In South Africa, a multi-modal, trauma-informed intervention for young women in low-income communities reduced symptoms of PTSD, depression, and substance use, as well as sexual risk behaviors associated with HIV (Myers et al., 2019). The Common Elements Treatment Approach has been found to reduce interpersonal partner violence and hazardous alcohol use among Zambian adults living with HIV (Murray et al., 2020) and its effectiveness in improving HIV treatment outcomes is currently being trialed with women experiencing intimate partner violence in South Africa (Pascoe et al, 2022). By addressing a multiplicity of outcomes within a single brief intervention, treatment access for trauma survivors with comorbid mental and behavioral health difficulties can be scaled up considerably within lower-resource settings.

While multi-problem approaches show promise in lower-resource settings, further research is needed to evaluate their effectiveness compared to diagnosis-specific treatments, as well as their long-term sustainability, particularly when delivered by non-specialist providers (Guttner & Pressau, 2019).

5. Summary

Critically low access to trauma interventions amongst adults in LMICs results from a range of demand- and supply-side barriers at different stages in the help-seeking process. However, there is promising empirical evidence that task-sharing, cultural adaptation, digital interventions, and flexible, multi-problem approaches can contribute to addressing these barriers. None of these are a stand-alone solution, but they are well-suited to working in tandem to synergistically increase



quality treatment access in lower-resource contexts. Moving forward, it is important to build on the existing evidence base, identifying strategies that can be generalized across LMICs but also those that are relevant to specific local contexts. Moreover, addressing challenges to implementation will be vital for increasing the population reach of empirically supported trauma interventions. Following are recommendations to guide an agenda for action going forward.



6. Recommendations

The scale of untreated mental health needs among adult trauma survivors in LMICs, and the economic burden that this poses to already resource-constrained settings, necessitate urgent collaborative action from policy makers, researchers, and service providers. Based on the existing evidence reviewed in this paper, we offer the following recommendations.

6.1. Public health and policy

- In LMICs that currently have, or are planning to implement, national health insurance schemes, treatment coverage for PTSD and other trauma-related disorders should be included.
- Mental health literacy and stigma reduction programs should be implemented to address attitudinal barriers to seeking help for traumatic stress. These programs should be tailored to address context-specific attitudes, beliefs, and norms that hinder help-seeking, drawing on research with local populations of trauma survivors. Individuals with lived experience of traumatic stress should be involved in the delivery of these programs using social contact strategies.
- LMICs should invest in the development of a cadre of accredited and adequately compensated community health workers to provide psychoeducation programs and trauma interventions. This can substantially reduce the treatment gap, especially in rural and remote areas. Capacitating community health workers to engage in peer-delivered supervision using digital platforms can ensure ongoing growth of this mental health workforce. In the long-term, this investment may be offset by a reduction in the burden of disease posed by traumatic stress in LMICs.
- Funding agencies should include task-shared, culture-specific trauma interventions as a
 priority for health and programming budgeting. Targeted programming efforts should be
 developed for marginalized and vulnerable groups in LMICs that are at higher risk of
 trauma exposure and/or traumatic stress (for example, persecuted religious minorities,
 people living with HIV/AIDS, and survivors of intimate partner violence).

6.2. Researchers

- Research on improving access to evidence-based trauma interventions in LMICs should be led or co-led by researchers in LMICs, to ensure contextually and culturally relevant research approaches and findings.
- Treatment barriers in specific LMIC contexts should be explored using qualitative research
 approaches that can capture the nuance and complexity of local experiences. These can
 then inform large-scale quantitative studies documenting the prevalence and correlates of
 contextually relevant treatment barriers.
- There is a need for the development of evidence-based screening and detection tools that include culturally congruent expressions of trauma-related distress alongside more universal aspects of traumatic stress, such as PTSD symptoms.
- Head-to-head comparisons between trauma interventions delivered by specialist versus non-specialist providers in LMIC settings should be conducted to inform decisions about the amount of training and supervision that is needed to bring non-specialist providers up to optimal competence.
- Research in LMICs should extend beyond evaluating the effectiveness of task-shared trauma interventions at the level of clinical trials to focus on implementation processes for disseminating these interventions in community settings and existing health systems.
 Implementation science theories and methods can be employed to inform these efforts.
- Cultural adaptations of evidence-based trauma interventions should be developed and evaluated in specific LMIC settings, with the involvement of local experts and community navigators. Adaptations should include both surface-level (e.g., language) and deep-level components (e.g., modifying explanations to fit with cultural values, or integrating local religious or cultural rituals). Involving people with lived experience of trauma and/or traumatic stress is crucial in all stages of intervention development, including piloting phases, where their feedback can be actioned for greater acceptability by the target beneficiaries.
- Culturally congruent outcome measures should be used alongside measures of DSM- or ICD-based trauma-related mental disorders to evaluate the effectiveness of culturally adapted evidence-based trauma interventions in LMICs.



- Additional research in LMIC settings is needed to evaluate the feasibility and effectiveness of digital platforms for 1) the training of non-specialist providers, 2) the delivery of large-scale psychoeducation and anti-stigma programs, and 3) the dissemination of trauma intervention programs. Given connectivity and data constraints in many LMICs, research should focus on developing and evaluating digital strategies that have low requirements for internet connectivity and mobile data usage. For example, the PTSD Coach mobile app requires no data usage post-download.
- Research should compare the feasibility and effectiveness of PTSD-focused versus multiproblem, transdiagnostic interventions for different populations of trauma survivors in LMICs, to establish what works best for whom.

6.3. Trauma practitioners / service providers in LMICs

- When delivering mental health interventions to trauma survivors in LMICs, culturally
 congruent, evidence-based assessment tools should be used to inform treatment
 decisions and monitor treatment progress. Validated trauma symptom measures that
 include key local idioms of distress and measure treatment targets deemed important to
 the local population should be used where available.
- There are empirically supported diagnosis-specific and multi-problem interventions for traumatic stress in LMICs. When selecting amongst these, interventions that have been culturally adapted for the specific LMIC settings where practitioners are based are likely to be most acceptable and effective for recipients.



7. References

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