Determinants of the effective, sustainable, and acceptable, implementation of mental health and psychosocial support interventions for Iraqi and Syrian populations affected by armed conflict

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A thesis submitted in partial fulfilment of the requirement for the degree of Master of Science in International Health by Simon Halm.

**Participant Declaration**: Where other people's work has been used (from either a printed or virtual source, or any other source), this has been carefully acknowledged and referenced in accordance with academic requirements.

The thesis "Determinants of the effective, sustainable, and acceptable, implementation of mental health and psychosocial support interventions for Iraqi and Syrian populations affected by armed conflict" is my own work.

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# **Abstract**

Introduction: Access to mental health care is a right for all. In conflict-affected areas such as Iraq and Syria, the need for mental health and psychosocial support (MHPSS) interventions remains high. To ensure the successful implementation of these interventions, it is crucial to understand the contextual factors that determine their effectiveness, accessibility, and sustainability. The objective of this thesis is to identify and analyse these determinants and structure them within an adapted implementation science framework.

**Methodology**: A comprehensive search of PubMed and PsycINFO databases as well as key websites was conducted between April and June 2024. Publications were selected using structured criteria to ensure their relevance to the objective and their focus on the populations of Iraq and Syria. In the subsequent thematic analysis, themes were first derived from the data and then structured into the existing EPIS (Exploration, preparation, implementation, and sustainability) implementation science framework, which was adapted in an iterative process.

**Results**: The literature search resulted in 35 publications. Fourteen themes among determinants of the effectiveness, acceptability, and sustainability of MHPSS interventions were identified. Outer context factors included the socio-economic-political environment, security situation, cultural factors, and individual patient characteristics. Important internal context factors were project planning processes and staff satisfaction within the implementing organisation, and its public image among beneficiaries. Bridging factors were advocacy, inter-organisational integration of services, cultural assessment, and capacity building. Innovation factors included the cultural adaptability, innovation characteristics, and cost-effectiveness.

**Conclusion**: To ensure successful implementation, factors across all domains of the EPIS framework need to be considered. Implementers should ask themselves whether the cultural context is understood well enough, local knowledge is valued, and capacity strengthened, whether the intervention itself is adaptable and innovative, and whether the internal context and collaboration of implementing organisations are truly aiming for sustainability.

**KEY WORDS**: Conflict, mental health, psychosocial interventions, implementation science, MHPSS

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## List of abbreviations

EPIS: Exploration, preparation, implementation, and sustainability

MHPSS: Mental health and psychosocial support

SDGs: Sustainable Development Goals

WHO: World Health Organisation

NGO: Non-governmental organisations

UNHCR: United Nations High Commissioner for Refugees

UNICEF: United Nations International Children's Emergency Fund

IASC: Inter-Agency Standing Committee

RCT: Randomised controlled trial

**NET: Narrative Exposure Therapy** 

**CBT:** Cognitive Behavioural Therapy

CA-CBT: Culturally Adapted Cognitive Behavioural Therapy

IPT: Interpersonal Psychotherapy

EMDR: Eye Movement Desensitization and Reprocessing

**CETA: Common Elements Treatment Approach** 

PTSD: Post-Traumatic Stress Disorder

PM+: Problem Management Plus

gPM+: Group Problem Management Plus

SH+: Self-Help Plus

MeSH: Medical Subject Headings

PubMed: Public/Publisher MEDLINE

PsycINFO: Psychological Information Database

MSF: Médecins Sans Frontières (Doctors Without Borders)

IMC: International Medical Corps

MoH: Ministry of Health

MhGAP: Mental Health Gap Action Programme

LGBTQ+: Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, and others

# Introduction

The field of global mental health is of personal importance to me because it encompasses medical, philosophical, anthropological and political aspects. Having trained as a psychiatrist in Switzerland, I was fortunate to have the opportunity to then work as a psychiatrist with Médecins Sans Frontières and hope to continue to do so in the future. Aware of the complexity of being a European mental health professional working in different cultural contexts, I see it as an opportunity to share my professional knowledge, but above all to learn from the communities we work with, as well as from colleagues from different cultural backgrounds. My approach as a psychiatrist has always been humanistic and patient-centred, which naturally leads to an interest in anthropological issues. Especially when helping people to adapt and change their behaviour, it is important to understand their personal stories and values, which are always uniquely influenced by cultural and societal factors. Understanding how communities and cultural structures work and how they can support mental wellbeing, resilience, treatment and social reintegration is essential for a holistic approach to treatment. My political socialisation has also led me to believe strongly in the importance of social equity and that every person, regardless of ethnic background, gender, income, ability, sexual orientation, or religion, has the right to live in dignity. One way in which this is manifested is in the universal right to access (mental) health care. A pervasive example of structural oppression is conflict and violence, and mental health problems are known to increase in these contexts. In my future work and decisionmaking, I hope to be able to contribute to the planning of mental health interventions for people around the world, especially those in neglected areas, including conflict zones. In line with the objective of this thesis, I hope to gain a deeper understanding of not only what types of interventions are efficacious in improving mental health outcomes in controlled conditions, but also how these interventions can be effectively implemented in real-world settings. This requires an understanding of how different contextual factors in the environment of the intervention, but also within the intervention and the implementing organisations themselves, determine successful implementation, and what needs to be considered to make these interventions effective, acceptable and sustainable in different contexts.

# 1 Background

### Global mental health

Mental health is a global public good and mental health problems are affecting millions of people in all countries of the world (1,2). Global mental health care focuses on understanding these problems, developing effective prevention and treatment interventions, and promoting access to mental health care and equity among different populations. Addressing these challenges is in line with the Sustainable Development Goals (SDGs), particularly SDG 3, which aims to promote healthy lives and well-being for all (3). To work towards achieving universal health coverage and to hold up the human right to access mental health care is central to these efforts (1). It recognises that everyone, everywhere should have access to the mental health care they need, at any time, also during humanitarian crises (1). Nevertheless, the prevalence of mental disorders such as depression and anxiety is increasing (2) and this development is potentially worsened by factors such as conflict (4–6), poverty (7) and lack of access to care (8,9).

#### Armed conflict and mental health

It has been well established that humanitarian emergencies, armed conflict, and displacement negatively impact people's mental health and psychological well-being (4,5). The World Health Organisation (WHO) estimates that more than one in five persons affected by conflict suffer from a mental health disorder (6) and that there is crucial demand to upscale mental health care in conflict settings. The experience of war and violence also has an impact at the community level, disrupting families and social cohesion. Future generations are affected by biological, cultural, and economic intergenerational processes (10). Further, it is known that contextual factors and social determinants play an important role for mental health in general and therefore also need to be considered when designing interventions (11). Contextual factors affecting mental health during times of conflict include resettlement, stigma and discrimination, as well as language and access barriers towards healthcare (12,13).

#### Conflicts in Western Asia

In recent decades, Western Asia has seen some of the worst protracted conflicts. Repeated and protracted wars in Iraq and Syria have resulted in hundreds of thousands of deaths and the displacement of millions. Large numbers of people, including women and children, have experienced loss of life, armed violence, torture and other war crimes (14,15). Despite the reduction of active conflict in some areas, there has been extensive damage to infrastructure and basic health services, and the burden on the mental health of affected populations remains high (16–19). Countries in the region that are not in active conflict have also been affected by a large number of incoming refugees (20).

#### Political context and healthcare systems

Syria's economy has suffered from more than a decade of civil war, as well as recent unforeseen events such as severe earthquakes and the Covid-19 pandemic. The country's gross domestic product per capita has fallen by over 90% since 2011, and unemployment and poverty remain major challenges across the country (21). The health system has been disrupted and many hospitals and critical infrastructure have been severely damaged or healthcare personal directly harmed by violence (22). Further, a report by Physicians for Human Rights shows that more than half of the doctors have left the country (23). Spending on mental health care in Syria is not well documented, but several reports indicate that the entire Syrian health system remains disrupted, and the WHO estimates that around 15 million people are in need of life-saving health services (19,21,24). According to the latest mental health related WHO data from 2016, there were less than half a psychiatrist and around one mental health nurse per 100,000 people in Syria, compared to 150 mental health nurses per 100,000 people in Turkey (25,26).

Iraq has experienced severe and protracted violence, first during the US-led war between 2003 and 2011, and then during the insurgency of the Islamic State of Iraq and the Levant (ISIS). The Iraqi people have suffered immensely, experiencing violence, human rights violations and widespread destruction of infrastructure, including health facilities (27–30). As seen in figure one, millions of people have been displaced over the years (see figure 1), (27). Up to now, Iraq's post-war economy remains fragile and heavily dependent on oil exports (31). Access to mental healthcare in Iraq remains challenging, with only one out of ten people with a mental health diagnosis receiving adequate treatment (17).

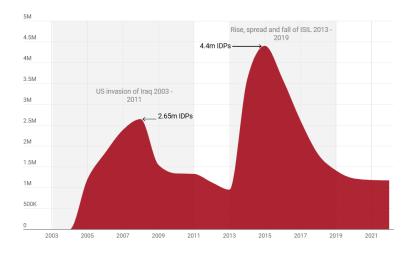


Figure 1: Internally displaced people in Iraq, UNHCR June 2022 (27)

The situation in both countries has led to massive displacement, with millions of Iraqis and Syrians becoming refugees or internally displaced. (14). Reflecting the trend that more than two-thirds of the world's refugees are hosted by neighbouring countries,

Turkey, Lebanon and Jordan have made enormous efforts in recent years to host large numbers of people affected by the conflicts in Iraq and Syria (20). Despite these efforts, in all three countries, refugees still have limited access to adequate health care (32).

Table one provides an overview over various economic and health-related indicators of the described countries (see table 1).

	GDP per capita	Health expenditure	Psychiatrists per	MH nurses per	Psychologists per
	(in USD in 2021)	per capita	100.000	100.000	100.000
		(in USD in 2021)	(in 2016)	(in 2016)	(in 2016)
Iraq	4770	249	0,34	1,21	0,11 (2017)
Syria	421	63 (2011)	0,36	1,07	1,07
Türkiye	10675	441	1,64	150251	2,54
Lebanon	4136	307	1,21	3145	3298
Jordan	4115	299	1,13	3297	1266
Netherlands	58728	6539	20,9 (2015)	N/A	12346 (2015)

Table 1: Overview of economic and healthcare indicators as available from world bank (25,26)

As a result of the situation, humanitarian efforts in Syria, Iraq, and their neighbouring governmental organisations (NGOs) like Médecins Sans Frontières (MSF) and United Nations Organisations (WHO, UNCHR, UNICEF) have been implementing a variety of programmes, some of them with a particular focus on mental healthcare. Due to the disruption in healthcare systems and the partly ongoing conflict, the need for future mental health intervention appears high.

## Mental Health and Psychosocial Support interventions

In recent decades, there has been a growing interest in mental health and psychosocial support (MHPSS) interventions for populations affected by conflict. Some of these efforts have resulted in the Inter-Agency Standing Committee (IASC), consisting of United Nations and other humanitarian actors, developing intersectoral guidelines for mental health interventions in humanitarian emergencies. A more detailed description of the IASC guideline can be found in appendix one.

#### Current evidence on efficacy of MHPSS interventions

The IASC guidelines provide an early attempt at a conceptual foundation. Since their publication, many studies have examined the efficacy of various interventions aimed at improving the mental health of conflict-affected populations (34,35). Several randomised controlled trials (RCTs) suggest that a range of psychological interventions are efficacious in controlled settings. In a 2018 Cochrane review, Purgato et al. included 36 studies with a total of more than 3,500 participants that investigated psychological treatment interventions for mental disorders in low- and middle-income countries affected by humanitarian crises (34). Of these studies, 23 used cognitive behavioural (CBT)-based approaches aimed at positively changing and adapting people's thoughts, emotions and behaviours. Seven studies investigated Narrative Exposure Therapy (NET) a short-term therapeutic intervention designed to help individuals process traumatic experiences. Among the other approaches included were interpersonal psychotherapy (IPT), the common elements treatment approach (CETA), eye movement desensitisation and reprocessing (EMDR), and general supportive counselling. In a similar review and meta-analysis of MHPSS programmes for adults in humanitarian emergencies, Bangpan et al. found 35 studies and categorised interventions as CBT, NET, other psychotherapy, psychoeducation and psychosocial programmes (35). Both meta-analyses concluded that there is evidence that psychological therapies have moderate effect sizes in reducing symptoms of post-traumatic stress disorder (PTSD), depression and anxiety disorders. Both authors discussed that to tailor interventions to different settings, it would be desirable to investigate the role of different linguistic and socio-cultural contexts and determinants.

Another important and active area of research and implementation are WHO-developed psychological interventions delivered by lay workers, such as (group) Problem Management Plus (PM+) and Self-help Plus (SH+). Both use structured mental health techniques such as stress management, problem solving and behavioural activation. They are designed to help people experiencing distress due to adversity, such as conflict or displacement. Preliminary evidence on their efficacy in reducing symptoms of depression, particularly among Syrian refugees, has been reported in a number of studies in recent years (36–38).

### Problem statement

The populations of Iraq and Syria share some cultural and linguistic similarities, and both have been affected by armed conflict (14,15). In recent years, many Iraqis and Syrians have been internally displaced or have sought refuge in other countries. While a small proportion of the population has moved to more distant areas, more than 80% remains within the neighbouring countries (20). It has been established that armed conflict has a negative impact on mental health (4–6), and access to appropriate mental health care for affected populations in Iraq, Syria and neighbouring countries is limited (17,22). The mental health responses in both Iraq and Syria are still in transition from emergency response to rebuilding health systems or, in the case of neighbouring countries, sustainable integration into existing systems (39). Therefore, the need for future sustainable MHPSS programmes remains high throughout the region. Numerous studies have examined and evaluated MHPSS interventions for people affected by protracted violence, some of which have been conducted with populations from Iraq and Syria (34,35). These studies have shown moderate effect sizes for various interventions, but much of the work to date has focused on intervention design and the measurement of mental health outcomes in controlled clinical trials. Some studies have also described internal and external contextual factors that influenced the acceptability and effectiveness of the interventions studied. Other studies have qualitatively examined the perceptions, facilitators and barriers experienced by the target populations of interventions. However, no systematic review of the contextual factors influencing the implementation process of MHPSS interventions in the specific context of working with conflict-affected populations in Iraq and Syria has been conducted to date.

## Justification

Implementation science can shed light on the process of introducing new practices and provide a framework for systematically addressing contextual factors that are critical to the real-world effectiveness and sustainability of interventions (40,41). In practice even an intervention that has shown to be efficacious in an RCT, might fail to improve real-life conditions if it cannot be effectively implemented and accepted within the wider context. In healthcare organisations implementation failure has been described as a barrier to effectively implement innovative interventions (42). Understanding which contextual factors influence implementation is crucial for developing and improving appropriate, feasible and culturally sensitive intervention strategies. To my knowledge, there has not been a comprehensive literature review synthesising evidence from RCTs, qualitative evaluations and grey literature on MHPSS interventions in Iraq, Syria and neighbouring countries where many Iraqi and Syrian refugees reside. Furthermore, the results of the studies have never been systematically integrated into an implementation science framework to explore what are the determinants of effectiveness, sustainability and acceptability during the implementation of these interventions. The focus on the

outcomes is justified by the need for real-world positive impact (effectiveness), long-term improvement (sustainability), and adequate culturally appropriate uptake (acceptability). The geographical focus is justified by the interest in studying determinants of humanitarian interventions in, or close to, the context of the affected region itself, rather than in studies of populations that have already resettled in another region of the world (e.g. studies of asylum seekers in European countries). Participants in studies conducted in European countries may have experienced different stressors during their journey or in the new cultural context compared to the population that remained in Western Asia. In line with the IASC guidelines (43) it seems justified to include a variety of interventions from individual and group therapies to community engagement and health promotion activities.

In conclusion, there is a particular need to synthesise findings from MHPSS interventions for Iraqi and Syrian populations and integrate them into a framework that is relevant to the real-world implementation challenges of mental health interventions. This thesis aims to address this research need and provide insight into how the gap between research and implementation practice can be bridged to ensure effective, acceptable, and sustainable implementation. The guiding question of this thesis shall be what factors determine if evidence-based practices have a positive impact in the real world.

# Study question

What contextual factors determine the effective, acceptable, and sustainable, implementation of mental health and psychosocial support interventions for conflict affected populations of Iraq and Syria?

# Objectives:

- 1. Identify and analyse themes underlying the determinants of
  - a. the effective,
  - b. the sustainable,
  - c. the acceptable,

implementation of MHPSS interventions for the Iraqi and Syrian populations.

- 2. Systematically synthesise and evaluate these findings using an existing healthcare implementation science framework and adapt the framework accordingly to guide structuring the development of future interventions.
- 3. Provide conclusions and recommendations for future research and for program implementation.

# 2 Methodology

# Analytical framework

#### The EPIS framework

The EPIS framework ((41),see figure 2), standing for exploration, preparation, implementation, and sustainment, is a model designed to guide the effective implementation and long-term sustainability of evidence-based practices in various organisational settings. Due to its approach of breaking down the implementation of evidence-based practices into four different main contextual factors, considering the external context, the internal characteristics of the implementing organisation, the factors bridging the first two, and the innovative nature of the intervention itself, it seems well suited to guide the analysis of this literature review. Each context factor includes specific elements that may influence project implementation within four different phases of the framework: Exploration, preparation, implementation, sustainment. The factors are described in detail in table two, the phases are described in more detail in appendix two.

#### Factors of the framework

Outer context	Describe the external context of the implemented intervention. These factors include the contextual sociopolitical and economic situation, government regulations, cultural context (predominant attitudes, social norms, religious beliefs), climate, as well as unforeseen outer events (pandemics, natural disaster).
Inner context	Refer to the internal context of the implementation. This group comprises leadership and support factors, the implementing organizations internal cultures (shared values, beliefs, norms), staff attributes, and intraorganizational infrastructure.
Bridging factors	Elements that connect inner and outer context such as advocacy, intermediaries, capacity building and trainings, inter-organizational networks (relationships and collaboration with other organizations).
Innovation factors	Describe characteristics of the intervention itself. Examples are: Real advantage, perceived benefits, complexity, evidence, and comprehensiveness of the implementation, alignment, and adaptability.

Table 2: Factors across the four domains of the EPIS framework

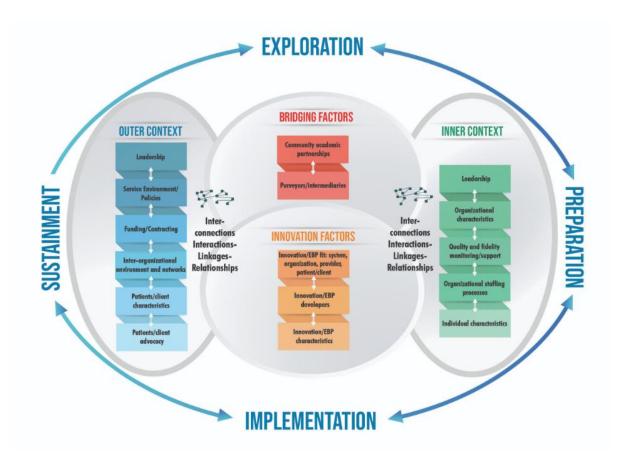


Figure 2: The EPIS framework (45) is used to guide the implementation of interventions/innovations. The different contextual factors are divided into four groups (external context, internal context, bridging and innovation factors). The groups are interlinked and are embedded in a continuous cycle of four phases throughout the implementation (exploration, preparation, implementation, sustainment).

## Literature Search Strategy

A structured search strategy was used to identify literature relevant to the research objective. MeSH terms and key words from three areas were identified: 1. Conflict setting, 2. MHPSS intervention, and 3. region of interest. Table 3 provides examples of related search terms and MeSH terms.

	MeSH terms	Search terms
Conflict setting key words	"Armed conflicts/psychology"[MeSH]	"Conflict-affected"[Title/Abstract]
	"Iraq War, 2003-2011"[MeSH] "Conflict setting*"[Title/Abstra	
MHPSS intervention key words	"Psychotherapy"[MeSH],	"Psychosocial support"[Title/Abstract]
	"Psychosocial Intervention"[MeSH]	"Psychological treatment"[Title/Abstract]
Region key words	"Asia, Western"[MeSH]	"Syria"[All Fields]
	"Middle East"[MeSH]	"Iraq"[All Fields]

Table 3: Examples of search terms

Boolean operators were then used to combine keywords and MeSH terms related to MHPSS, psychosocial support, armed conflict, humanitarian crisis and the region of interest in a search algorithm. The PubMed and PsycINFO databases were then systematically searched using the search strategy. Appendix three provides an example of the literal search strategy used for the PubMed search.

Due to the interdisciplinary nature of the topic and the importance of a variety of evidence sources, an additional grey literature search of relevant websites (WHO, IASC, UNHCR, UNICEF, MSF) was conducted and identified five additional reports that met the inclusion criteria. The grey literature search was performed using search functions on official websites of organisations, and databases on various official reports and policy documents.

# Screening process

The literature screening process was carried out in two stages: First, an initial screening of titles and abstracts, and second, a full-text review of selected studies. The initial literature search yielded 330 publications, which were manually screened for relevance and inclusion and exclusion criteria in the title and abstract. Title and abstract screening were done manually, applying the inclusion and exclusion criteria (see table 4 and 5 below). References and citations of relevant studies were reviewed, and snowballing techniques were used to identify additional relevant studies. The resulting 58 publications were then assessed for full text review, out of these 28 were excluded based on the exclusion criteria. The search resulted in 35 publications being included in this review. Figure three provides an overview over the flow of studies through the literature search process.

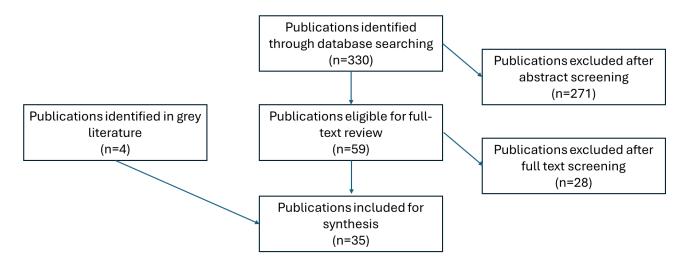


Figure 3: Summary of the flow of studies through the review

Studies were selected based on the below-mentioned predefined inclusion and exclusion criteria developed to focus on the most relevant literature. Inclusion criteria ensured studies that (1) described or evaluated psychosocial interventions, (2) were conducted in the context of armed conflict of Iraq and Syria, and (3) reported on the effectiveness, sustainability, or acceptability of these interventions. Exclusion criteria were applied to studies that did not focus on psychosocial interventions, were not related to armed conflict contexts, or were outside the geographical scope of interest.

# Inclusion and exclusion criteria

# Inclusion criteria

Geographic Focus	Only countries of origin and countries directly bordering the countries of			
	interest were included, namely Syria, Iraq, Turkey, Jordan and Lebanon.			
Population	The study population must include individuals, communities or groups directly			
	affected by the armed conflict in Syria or Iraq. This includes internally displaced			
	persons (IDPs), refugees remaining in neighbouring countries, and non-			
	displaced populations directly affected by the conflict.			
Type of intervention	Eligible publications must examine or describe individual, community-based or			
	group psychosocial interventions. This may include, but is not limited to,			
	counselling, psychotherapy (group and individual), support groups, community			
	engagement activities, capacity building and mental health promotion			
Focus on contextual	Publications must characterise determinants of contextual factors that			
factors	influence the effectiveness, sustainability or acceptability of psychosocial			
	interventions. This includes perceived barriers, challenges, adaptations and			
	opportunities related to the implementation of these interventions.			
Outcome measures	Studies should report on outcomes related to the effectiveness (e.g.,			
	improvements in mental health indicators), sustainability (e.g., long-term			
	continuation of interventions), or acceptability (e.g., stakeholder perceptions,			
	cultural appropriateness) of psychosocial interventions.			
Study design	Both qualitative and quantitative study designs are included, such as			
	randomised controlled trials (RCTs), cohort studies, cross-sectional studies,			
	case studies, qualitative studies and mixed methods research. A			
	complementary grey literature search will also include non-scientific reports			
	from relevant organisations and stakeholders, if relevant according to the other			
	inclusion criteria.			

Table 4

# Exclusion criteria:

	,		
Geographic Focus	Studies conducted outside Syria, Iraq, Turkey, Lebanon or Jordan and with		
	populations resettled in non-neighbouring countries are excluded.		
Population	Studies that focus on populations not affected by armed conflict are excluded.		
Type of intervention	Publications focusing on purely medical or pharmacological interventions		
	without an accompanying psychosocial component are excluded.		
Focus on contextual	Studies that do not specifically address the determinants or contextual factors		
factors	related to the effectiveness, sustainability or acceptability of interventions.		
Outcome measures	Studies that do not report quantitative or qualitative outcomes related to the		
	effectiveness, sustainability, or acceptability of psychosocial interventions.		
Study design	Studies with incomplete data or those that do not have accessible full-text		
	versions may be excluded.		

Table 5

#### Qualitative synthesis and thematic analysis

A standardised data extraction form (see appendix 4) was used to collect key information from each included publication, such as study location, population, type of intervention, outcomes measured, reported evidence, and key findings related to challenges and opportunities. Then, the included full-text papers were uploaded into NVivo 14 software. Figure 4 illustrates the process of the thematic analysis. Initial codes were derived inductively from the identified publications (1) and then organised into related themes around the implementation of psychosocial interventions in the context of interest (2). These themes were then adapted and organised using the structure and the four domains of the analytical framework (3). The resulting codebook (see appendix 5: Codebook) was then used to again screen the literature for relevant findings (4), resulting an iterative process (see figure 4).

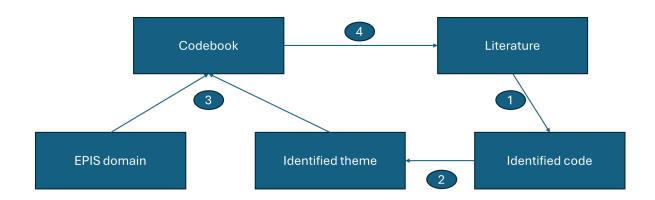


Figure 4: Thematic analysis

## 3 Results

# Characteristics of publications

The literature search identified 35 publications, out of these 16 were randomised controlled trials (37,44–57), eight were qualitative studies (38,58–64), four descriptive reports (65–68), two cross-sectional studies (69,70), two pilot/assessment studies (36,71), one observational study (72), one descriptive commentary (67), and one economic evaluation study (73). Table six provides an overview of all included publications.

## Geographic scope of interventions

Out of these publications six publications reported on interventions in whole Iraq (55,71), two in Iraqi Kurdistan (52,70), and two in Southern Iraq (cities of Basra, Nassariyah, Karbala, Najaf and Hila) (45). Ten publications were on interventions in Jordan, two in Amman (47,57), three in Azraq refugee camp (37,48,74), one in Baqa'a refugee camp (59), the remaining in different major urban centres (38,56,63,64). Four publications on interventions in Syria were included: One from north-west Syria (61), two solely from Damascus (66,68), and one from Damascus and later extended to Aleppo, Tartous, As-Sweida, and Homs (65). Six publications reported from Lebanon, two covering the whole country (49,53), two from Beirut and Beqaa governorate (58,62), one from Burj-el-Barajneh refugee camp in southern Beirut (72), and one from Wadi Khaled refugee camp (60). The remaining eight publications were from Turkey with five from Istanbul (36,51,54,69,73) and three from Kilis Refugee Camp also known as Öncüpınar Accommodation Facility (44,46,50).

## Type of interventions

Out of all interventions four reported on Group Problem Management + (36,37,47,74), two on Self Help Plus (51,73), one on Problem Management+ (38), two on EMDR (44,50), one on group EMDR (46), one on Narrative Exposure Therapy (75), two on Common Elements Treatment Approach (45,58), one on Early Adolescent Skills for Emotions (47), one on Cognitive Processing Therapy (45), one on Culturally Adapted Cognitive Behavioural Therapy (54), two on Cognitive Behaviour Therapy-based digital interventions (55,71), three on UNHCRs MHPSS programmes (65,66,68), one on Advancing Adolescents (56), one on Trauma-informed supportive counselling (52), one report on telepsychiatry (67) and one training intervention (49). Further, there was one cross-sectional survey (69) and eight qualitative assessments with key informant interviews and focus group discussions (38,59–64,70). Appendix six provides a short description of the content of all reported interventions.

**Table 6:** Overview of included publications

Study (author, year)	Study design	Setting	Population	Intervention of interest
Al-Shatanawi (2023)	Qualitative study, semi- structured interviews with a sample of key informants	Jordan	Adolescent Syrian refugees	Various MHPSS interventions
Acartuk (2015)	RCT	Turkey, Kilis Refugee camp	Syrian refugees with PTSD	PST-EMDR
Acartuk (2016)	RCT	Turkey, Kilis Refugee camp	Syrian refugees with PTSD	PST-EMDR
Acaturk (2022)	Pilot study	Turkey, Istanbul	Syrian refugees with psychological distress (Kessler Psychological Distress Scale > 15)	Group Problem Management Plus (gPM+)
Acaturk (2022)b	RCT	Turkey, Istanbul	Syrian refugees experiencing psychological distress (General Health Questionnaire ≥3)	Self-HelpPlus(SH+)
Akhtar (2021)	RCT	Jordan, Azraq refugee camp	Syrian refugees with psychological distress (Kessler Psychological Distress Scale > 15)	Group Problem Management Plus (gPM+)
Akhtar (2021)b	RCT	Jordan, Amman	Syrian children aged 10–14 years who reported psychological distress	Early Adolescent Skills for Emotions (EASE)
Al Laham (2020)	Qualitative study, eight focus group discussions and eight key informant interviews	Lebanon, Wadi Khaled,	Syrian refugees	MSF mental health intervention
Bass (2016)	RCT	Iraq, Kurdistan, ISIS-related violence	Adults with trauma exposure and a symptom severity score indicating significant distress and functional impairment	Trauma-informed supportive counselling, skills, and psychoeducation intervention provided by community mental health workers (CMHWs)
Bastin (2013)	Observational	Lebanon, Beirut In Burj-el- Barajneh	Patients diagnosed with mental health disorders	Individual therapy (psychological, psychiatric), couple, family, group or art therapy

Bawadi (2022)	Qualitative study, semi- structured qualitative interviews	Jordan, six main cities	Syrian refugees and community leaders	Various MHPSS interventions
Bou-Orm (2023)	Qualitative study, mixed- methods assessment (semi-structured interviews and a group model building workshop as well as a survey)	Syria, North- West	Communities affected by conflict	Various MHPSS interventions
Bryant (2022)	RCT	Jordan, Azraq Refugee Camp	Syrian refugees	Group Problem Management Plus (gPM+)
Bryant (2022)b	RCT, 12-months follow up	Jordan, Azraq Refugee Camp	Syrian refugees	Group Problem Management Plus (gPM+)
Cujpers (2022)	RCT	Lebanon, online	Displaced people from Syria with depression (PHQ-9 > 9) and impaired functioning (WHODAS>16)	Guided "Step-by-Step" intervention
Eskici (2023)	RCT	Turkey, Istanbul	Syrian refugee women	Culturally adapted cognitive behavioral therapy (CA-CBT)
Fuhr (2020)	Cross-sectional survey	Turkey, Istanbul	Syrian refugees	Various MHPSS interventions
Harrison (2013)	Non-research (descriptive report), accessed from grey literature	Syria	Syrian people affected by war	UNHCR MHPSS program (a mixture of (mobile) individualised case management, family and community level supports provided by outreach volunteers, and targeted assistance to displaced persons living in collective shelters)
Hijazi (2011)	Non-research (descriptive report), accessed from grey literature	Lebanon	Primary health care staff (GPs, specialized doctors working as GPs)	12 theoretical training days, and a minimum of three on-the-job, supervised clinical sessions
Jefee-Bahloul (2014)	Non-research, commentary	Jordan, US, telemedicine	Syrian refugees in Jordan affected by Syrian Civil War	Telepsychiatric consultations
Knaevelsrud (2015)	RCT	Iraq	Arab speaking adults with clinical PTSD accoding to DSM-IV	Cognitive behavioral Internet-based intervention

McEwen (2024)	Qualitative study, semi-	Lebanon, Begaa	Syrian refugees	Common Elements Treatment
, ,	structured interviews	region	, ,	Approach, was adapted for
				telephonedelivery (t-CETA)
McKell (2017)	Qualitative study, semi-	Jordan, Baqa'a	Healthcare	Various MHPSS interventions
,	structured interviews	refugee camp	professionals	
Mirghani (2013)	non-research (descriptive	Syria	Syrian refugee	Training of outreach volunteers (ORV)
	report), accessed from	-,	volunteers	Support groups
	grey literature			
Noubani (2020)	Qualitative study, nine semi-	Lebanon, Beirut	Syrian refugees	Various MHPSS interventions
( 1 1,	structured interviews and	and Begaa		
	four group model building			
	workshops.			
Panter-Brick (2018)	RCT	Jordan, urban	Syrian refugee	Structured activities informed by a
		centres of Irbid,	adolescents	profound stress attunement (PSA)
		Jarash, Mafrag,		framework (Advancing Adolescents)
		Ajloun and Zarqa		, and the state of
		governorates		
Park (2022)	Economic evaluation	Turkey, Istanbul	Syrian refugees	Self-HelpPlus(SH+)
Quosh (2013)	Non-research (descriptive	Syria	Refugees and IDP in	UNHCR MHPSS response
	report), accessed from	,	Syria	(comprehensive mental health and
	grey literature			psychosocial support case
	0 .,			management; community outreach and
				a psychosocial centre)
Rasheed (2022)	Cross-sectional,	Iraq, Kurdistan	Yazidi refugees	Various MHPSS interventions
, ,	questionnaires, semi-	,,		
	structured interviews			
Smaik (2023)	RCT	Jordan	Syrian refugees with	Narrative exposure therapy (NET)
			PTSD	
Wagner (2012)	Pilot study	Iraq	Arab speakers with	Internet-based CBT intervention for
			history of torture or	posttraumatic stress disorder
			trauma	
Weiss (2015a)	RCT	Iraq, Southern	Iraqi people with	Common Elements Treatment Approach
		Iraq (cities of	elevated	(CETA)
		Karbala, Najaf	trauma symptoms and	
		and Hilla, south	experience of	
		of Baghdad)	systematic violence	
Weiss (2015b)	RCT	Iraq, Southern	Iraqi people with	Cognitive processing therapy (CPT)
		Iraq (cities of	elevated	
		Basra and	trauma symptoms and	
		Nassariyah in	experience of	
		the far south of	systematic violence	
		Iraq)		
Woodward (2023)	Qualitative study, semi-	Jordan	Stakeholders	Problem Management Plus (PM+)
	structured individual and		knowledgeable	,
	group interviews		about PM+ and the	
			mental health system for	
			Syrian refugees in	
			Jordan	
Yurtsever (2018)	RCT	Turkey, Kilis	Syrian refugees with	Group Eye Movement Desensitization
(2020)		Refugee camp	PTSD symptoms	and Reprocessing Therapy
			,	(EMDR G-TEP)
	1		1	11 /

# Thematic analysis

As a result of the iterative thematic analysis codes were merged into 14 themes, across the four domains of the EPIS framework (see table 7).

EPIS domain	Identified themes	Initial code
		Security situation
	Conflict and security	Ongoing conflict and access
		Ongoing conflict and mental health
		Socio-economic problems
	Socio-economic-political	Host country legal system
	environment	High mobility
Outer context		Covid-19
		Female gender
	Individual patient characteristics	Gender-based violence
		Male gender
		Stigma
	Cultural factors	Narratives around mental health
		Religion
		Health promotion
	Advocacy	Engagement with religious autorities
		Engagement with governemt
		Engagement with healthcare leaders
	Inter-organisational integration of	Fragmentation of services
Pridging footors	services	Service mapping
Bridging factors		Collaboration between NGOs
	Assessment and validation	Assessment studies
	Assessment and validation	Validation of tools
		Task-sharing
	Capacity building	Training activities
		Integration into PHC
	Project planning processes	Cyclical planning and funding
	1 Toject planning processes	Long-term commitment
	Public perception of implementing	Values of organisation
Inner context factors	organisation	Public image
		Carreer opportunities
	Staff satisfaction	Psychosocial support
		Working culture
		Cultural concepts
	Adaptability	Idioms of stress and mental health
		Ethnic minorities
		Group therapy
Innovation factors	Innovation characteristics	Tele-counselling
	iiiiovauoii ciiai acteristics	Digital interventions
		Severe mental health disorders
	Cost-effectiveness	Real-world effectivness
	Cost-enectiveness	Economic analysis

Table 7: Initial codes, identified themes and EPIS domain

Figure five shows the codes derived from the findings structured according to the domains of the EPIS framework:

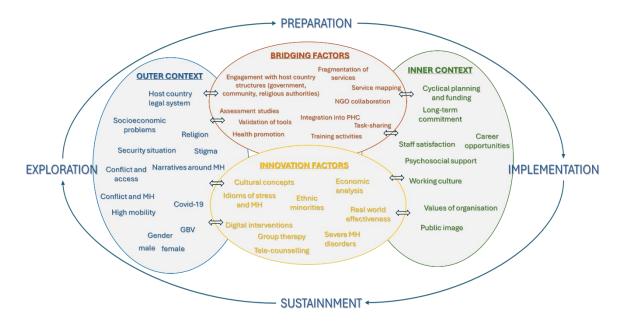
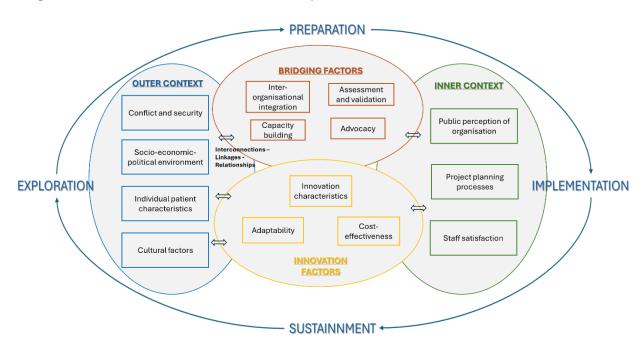


Figure six shows the themes within the EPIS framework adapted to the findings and the merged themes which derived from the analysis:



## Outer context factors

## Conflict and security

#### Security situation

Several studies reported ongoing conflict and a volatile security situation as a challenge for the implementation of MHPSS interventions (46,51,55,61,65,66). Ongoing conflict may affect both the accessibility of the intervention, due to physical problems of access and geographical fragmentation of services, and their effective implementation, due to direct negative impacts on mental health outcomes.

#### Ongoing conflict affecting access

A mixed-methods study of MHPSS service provision in the context of north-west Syria described how the availability of services was geographically fragmented due to the ongoing armed conflict (61). In a report on UNHCR's MHPSS activities in different areas of Damascus, the established psychosocial counselling centres had to close repeatedly because of increased security problems in the area, which prevented both local staff and patients from accessing them (65). Beneficiaries reported access problems even when the centres were operational, as they had to leave their shelters and pass through conflict zones and armed checkpoints. Another UNHCR report highlighted that since most refugees live in urban areas rather than in camps, the expansion of telephone follow-up, crisis hotlines and mobile outreach programmes was crucial to overcoming access problems in these vulnerable communities (66,76).

One approach to addressing access issues in insecure areas is to deliver mental health interventions digitally. Knaevelsrud et al. cited the fact that in the Iraqi context, many doctors and mental health providers had been exposed to indiscriminate shootings, kidnappings and torture as one of the reasons for choosing to deliver an online intervention. However, the project coordinators' inability to travel to Iraq due to the deteriorating security situation was discussed as a barrier to successful implementation (55).

#### Ongoing conflict affecting mental health

During the major Turkish military offensive in 2019 (Operation Peace Spring) in northeastern Syria, armed fighting resumed and although the official aim was to create a safe zone for Syrian refugees, Acarturk et al. noted that these events affected the implementation of their psychological self-help intervention (SH+), as people reported increased stress and fear of deportation (36). In their study of gPM+ for Syrian refugees in Jordan, Bryant et al. similarly discussed that the constant fear of being deported back to Syria may have negatively affected mental health outcomes. (74). Particularly studies of populations with post-traumatic stress disorder have identified living in areas of ongoing conflict as a major barrier to improving mental health outcomes. Wagner et al. reported that in the context of post-war Iraq, ongoing local fighting kept patients in a hypervigilant state (71). In a group EMDR study for Syrian refugees suffering from PTSD,

Yurtsever et al. found that both the intervention and control groups experienced repeated re-traumatization from watching television about the ongoing war and receiving news from relatives in active conflict zones. (46).

## Socio-economic-political situation

### Socio-economic problems

Populations affected by armed conflict are almost always simultaneously affected by socio-economic hardship. Several studies have identified socio-economic problems as a major factor affecting the effective implementation and accessibility of MHPSS interventions (46,51,62,63,66,71,77,78). Socio-economic problems can affect the accessibility of an intervention due to the inability to afford transport costs and/or the need to prioritise income generation over healthcare and they can also have a direct negative impact on mental health. Limited mobility and transport costs impaired access to programmes in different contexts. For Syrian refugees living in Beqa, Lebanon, access to a car was a rarity and taxis or buses were simply not affordable. In addition, long travel times to established clinics conflicted with childcare responsibilities (77). In the same evaluation, weather conditions were identified as a major challenge, as refugees were simply not equipped with clothing suitable for the harsh winter conditions of heavy rain and snow. Qualitative interviews conducted with lay counsellors showed that all of them supported the view that interventions would be limited in their effective implementation due to the major structural problems faced by the refugee population (77).

There is a well-established link between mental health problems and socio-economic difficulties such as poverty, unemployment, low income, lack of education and inadequate housing, which was also observed in this review. Noubani et al. found that restrictive policies on Syrian refugees' access to the formal labour market in Lebanon led to financial hardship and psychosocial stress, resulting in most refugees being employed informally and discriminated against with unequal pay. A qualitative study of adolescent Syrian refugees in Jordan identified financial and educational problems, as well as high rents, as predominant psychosocial issues (63). In an Internet-based intervention for PTSD in Iraq, economic hardship contributed to patients' constant hypervigilance, making it difficult for them to maintain a regular writing schedule and causing them to take longer to complete the intervention than similar groups relocated to Europe. (71). Lack of education and illiteracy also affected an EMDR group intervention with Syrian refugees in Turkey, but the authors found that alternative therapy methods, such as drawing, proved helpful and should be considered in future studies (46).

In the qualitative assessment by Noubani et al. when asked for potential for improvement of their situation "all participants noted the need for job opportunities with better salaries, which would enhance their financial situation and living conditions, and ultimately improve their psychological well-being." (62). Another Syrian mother was

cited in the study of McEwen et al.: "We are missing a lot. The biggest missing thing for us is financial. So, we see someone come to us and take down our names and tells us 'we want to speak to you, and we want to comfort you', we hope that this person gives us money." (77).

#### Host country legal system

Improving socio-economic opportunities can be directly linked to the legal system of the host country as an important external contextual factor. Quosh et al. reported that the lack of legal access to employment was one of the two main contextual challenges for Iraqi refugees in Syria, as it kept them in a perpetual state of dependency and economic instability. Although the programme reportedly improved psychosocial well-being, it did not empower to generate income, potentially limiting effective implementation and long-term and sustainability (66). In their gPM+ study, Bryant et al. found that restrictions on movement, limited employment opportunities, and lack of freedom to make independent life choices impaired the application of learned psychosocial techniques, a core component of the intervention (74). Another example was described in the implementation of PM + for Syrians in Jordan. In the spirit of shared responsibility and empowerment, the intervention is designed to train lay workers in the community, but due to legal system barriers, Syrians could not be employed as lay mental health workers (38).

### High mobility rate of refugees

In conflict settings, populations often flee violence repeatedly or relocate to safer countries. High dropout rates in CBT and EMDR interventions for Syrian refugees were discussed to be caused by the high mobility of participants (44,54). Refugee mobility can also involve returning to home countries for job opportunities, as seen in the gPM+ intervention study in Jordan, where many participants withdrew to return to Syria (48).

#### Covid-19

The Covid-19 pandemic disrupted social, economic and health systems worldwide and affected the implementation of MHPSS interventions in Syria and Iraq. Acarturk et al. found that lockdowns, job loss, social isolation, and socioeconomic issues in 2020 affected the follow-up to their study, making it necessary to interpret the results in the context of the ongoing pandemic (51). Woodward et al. identified both negative aspects and potential opportunities during Covid-19: Access to beneficiaries was physically limited and funding competed with Covid-related health care, but there was increased openness to mental health issues such as social isolation, and remote psychosocial support was perceived as reducing stigma. (38). During a feasibility study on NET for Syrian refugees suffering from PTSD in Jordan the authors also stated that lock down measures during follow-up influenced the outcomes of the study (75).

## Individual patient characteristics

Several studies have reported that gender played an important role in the acceptable and effective implementation of psychosocial interventions among Iraqis and Syrians (38,44,46,48,64,71,74,77,78).

### Female gender affecting acceptability:

In their study of EMDR for Syrian refugees, Acarturk et al. actively recruited patients with PTSD and reported that nine of 16 people who refused were women, stating that their husbands would not allow them to participate, and another woman was excluded from the study because she was pregnant (44). In a qualitative assessment of PM+ for Syrian refugees in Jordan, one gender specific barrier was that women could not attend group therapy without their spouse's consent (38). Although not gender-related per se, childcare responsibilities were cited as a reason for low uptake of interventions, and in the context of Iraq and Syria, women were often responsible for childcare. For Syrian refugees in Turkey, barriers to completing the gPM+ programme included the need to provide for the family and childcare responsibilities due to a lack of childcare facilities (36). In a similar assessment the provision of childcare during therapy times was described as a potential facilitator (38). Other types of gender discrimination may be experienced by unmarried women. Particularly for young women, accessing mental health services was seen as problematic by families because it could affect future marriage prospects (77). Bawadi et al. cited a 22-year-old woman with a statement that illustrates the experience of many women: "If my husband knows I have been visiting the mental health clinic he will divorce me." (64).

#### Gender-based violence

Wagner et al. described how, in Arab countries, the belief that women will be dishonoured if they are victims of sexual violence made them reluctant to seek MHPSS services or even to talk about their experiences, as this could have serious consequences for their personal lives (71). In the context of the genocide against the Yazidi people from 2014 to 2017, several studies assessed the negative mental health outcomes for affected women. Ibrahim et al. found that enslavement and war-related sexual violence resulted in high rates of PTSD and depression, with social rejection playing an important mediating role (79). Similar findings were reported in a study by Goessmann et al. who concluded that addressing gender-based violence is important in all health interventions in post-conflict settings (30). Importantly, gender-based violence occurred not only as a weapon of war, but also within families and communities, negatively affecting women's mental health (71,77,78).

#### Male gender:

Male participants are often under-represented in research on humanitarian interventions in general, with a large number of studies focusing on female participants or children (80). For the context of interest, a number of studies have identified male

gender as a factor in the acceptable and effective implementation of psychosocial interventions (46,48,62,74). Among Syrian refugees in Lebanon men considered not being able to provide financially for their families to be the main stressor, and therefore prioritised any type of income-generating activity over participation in mental health interventions (62). Yurtsever et al. added that during their sampling, prejudice against mental health treatment was more prevalent among men, resulting in a smaller number of male participants (46). In a feasibility study of gPM+, Akhtar et al. reported that when they went door-to-door to provide information about the programme, they were mostly referred to women, while men cited income-generating activities as a reason for not participating (48). However, retention was high among the men who took part in the trial. The authors concluded that the problem was with initial engagement rather than retention. In their study implementing gPM+ Bryant et al. discussed the predominance of women in their sample and emphasized that "participation of males in psychological trials is much needed in global mental health" (37).

## Cultural factors

### Stigma

Across cultures, mental health-related stigma delays health-seeking behaviour and reduces the acceptability of interventions, and the same was reported in several studies of Iraqi and Syrian populations (38,44,59,60,62,81,82). Studies reported fear of embarrassment, stigma and social exclusion as the main barriers to accessing mental health services. For Syrian refugees in Turkey, fear of stigma was the main barrier to accessing MHPSS programmes. More than one in five cited concern about what other people would think as the main reason for not seeking mental health care (81). Acarturk et al. reported that Syrian refugees cited fear of embarrassment if others discovered their participation as the main reason for not participating in gPM+ (36). Going further, four participants of an EMDR study dropped out because they feared becoming "majnun" (insane) as a result of the offered psychotherapy (44).

#### Narratives around mental health

Among Syrian refugees in Lebanon, semi-structured interviews revealed that informants saw mental health problems as a personal failure and described affected individuals as not fitting into the community (62). Refugees in Jordan reported that discrimination against people with mental health problems was more pronounced than in non-Arab cultures, an mental illness was either denied or perceived as a spiritual problem or punishment (59). Similarly, Syrian refugees in northern Lebanon reported a narrative of shame and fear around mental health problems (60). Interestingly, those Syrian refugees in Jordan who were open to working with health professionals preferred a medicalised approach to mental health over the biopsychosocial model used by MHPSS programmes, expecting medication and doubting the benefits of psychotherapeutic and behavioural approaches (38).

#### Religion

Religion and spiritual beliefs were found to be external context factors significantly influencing the acceptability of interventions. In a qualitative assessment of Syrian refugees in northern Lebanon, Al Laham et al. found that socio-cultural characteristics shape perceptions of mental health and health-seeking behaviour. The beliefs of *Jinn*, *Sehr*, and *Hasad* were widely present and related to perceptions around mental illness (60). The concept of Jinn is prevalent in many Muslim cultures, where Jinns are seen as invisible entities that can influence human affairs and cause phenomena like mental illness or epilepsy. Sehr, or witchcraft, is often believed to cause various physical, emotional, or personal problems, leading individuals to seek spiritual healing, such as reciting Qur'anic verses, instead of professional mental health care. Hasad, or the evil eye, is the belief that envy, or jealousy can harm both the envious person and the one envied. All these beliefs may influence mental health-seeking behaviour (60). Noubani et al. noted that men in particular preferred to wait and endure mental problems rather than seeking help because many perceived that God was testing their endurance and patience when going through mental struggles and difficult times (62).

Notably, religion can also positively influence mental health care. Al-Shatanawi et al. mentioned praying and reading the Qur'an as common positive coping mechanisms for psychosocial problems among adolescent Syrian refugees in Jordan (63) and an effective CA-CBT intervention for Syrian refugees was based on a treatment manual designed to culturally adapt CBT for Muslim populations (54). Unawareness of the religious context can also directly affect the effective implantation: Weiss et al. described how they had to adapt their interview schedules and experienced delays in implementation due to disruptions caused by the religious holiday month of Ramadan (45).

#### Inner context factors

Inner context factors comprise characteristics of implementing organisations such as internal culture (shared values, beliefs, working culture), the organisations public image, staff attributes, and intra-organisational processes.

#### Project planning processes

#### Cyclical planning and funding

Project planning by international NGOs often follows a cyclical, short-term planning structure, which can lead to challenges regarding the effective and sustainable implementation of interventions. In a mixed-methods study in north-west Syria, participants viewed the continuity of MHPSS interventions as uncertain. Interviewees from local staff of international NGOs and an established MHPSS technical working group cited cyclical funding, with no guarantee of renewal, as a major issue leading to staff uncertainty and potential service disruption. (61). In a humanitarian setting in Lebanon, counsellors interviewed also described annual funding cycles as problematic

for the sustainability of interventions (77). When funding for an intervention ends, participants may be referred within the patchwork of interventions, but a lack of continuity can affect the quality of services, particularly in mental health programmes where trust and therapeutic relationships are crucial. In their assessment of scaling up PM+ in Jordan, Woodward et al. recommended that real scaling up may only be possible if sustainable prospects are provided for local and international staff, and continuous training and supervision, as well as long-term project coordination, are ensured. Human and financial resources were identified as potential organisational challenges (38).

### Uncertainty about long-term commitment

An unclear long-term commitment due to cyclical planning and/or funding insecurities was found to impair the effective and sustainable implementation of interventions. In the assessment mentioned above, participants described that although the majority of funding comes from international organisations, a sustainable, long-term working relationship with local authorities is crucial for a sustainable scale-up of the intervention (38). A methodological challenge of intervention studies that do not cover a substantial period is the lack of long-term follow-up and therefore lack of sufficient data on the sustainability of effects. For example, Bass et al. conducted an RCT of a psychosocial intervention in northern Iraq, but were unable to report on sustained effects due to the short duration of the intervention and lack of long-term follow-up (52). Similarly, Smaik et al. reported that their pre-post-test design allowed them to report on the short-term effects of NET, but did not allow them to track whether symptoms returned at a later point in time (75). All in all, lack of long-term commitment affects quality of services and sustainability. Local staff interviewed in a mixed-methods study in north-west Syria suggested a more long-term commitment to ensure the quality of the intervention. One mhGAP trained physician was cited: "...the psychiatric clinic where I work will stop in a few days and the continuity of services is still not guaranteed." (61).

#### Staff satisfaction

Working culture, career opportunities, psychosocial support

Working culture, recognition, career opportunities and the provision of psychosocial support all influence how staff of implementing organisations work and therefore play an important role in the effective implementation of interventions. In the context of Iraq and Syria, staff of MHPSS services in north-west Syria reported very high workloads and a lack of stress-relieving activities and self-care opportunities provided by implementing organisations (61). Similar comments about high workloads and low levels of psychosocial support were made by mental health professionals in MHPSS projects in Jordan (59). Local humanitarian staff reported feeling uncertain about their future job prospects once the intervention or study had ended (61). Additionally, the assessment of staff mental health and description of psychosocial support for own staff is scarcely reported in literature. No study was found to systematically assess the mental health or

symptoms of burnout among implementing workers in the context of interest of this review.

## Public image and values of the implementing organisation

While most international NGOs and UN agencies benefit from the appreciation and positive public image they enjoy in Western countries, there are also contexts in which the public perception of foreign organisations can be more ambiguous. Although international NGOs emphasise their political neutrality and impartiality, in some contexts they can still be perceived as foreign intruders or agents, putting operations and staff at risk (84). Several studies mentioned issues of trust and doubts about the purpose and good intentions of organisations affecting the acceptability of interventions. Acarturk et al. described how researchers were perceived as "Western" and as potential collaborators with the Syrian government. Participants cited these precautions as reasons for not videotaping therapy sessions (44). In a feasibility study of a web-based intervention for Iraqis with post-traumatic stress symptoms, many participants expressed doubts about the safety and neutrality of the website and interface used for the treatment. Despite considerable efforts to inform participants about confidentiality and the purpose of the study, many participants reported fears that the website was supported by foreign intelligence services (CIA, Mossad) and/or that their data was not secure (85). During the UNCHR response in times of the Iraq war even local Syrian and Iraqi staff working with refugees were seen as collaborating with the enemy. Some reported receiving threatening letters and spoke of fears that their work with the UN would cause problems for relatives remaining in Iraq (68). For some locals "UNHCR was just another face of the USA, which was considered by some Iraqis as responsible for their suffering and displacement" (68).

# **Bridging factors**

Bridging factors are elements that connect inner and outer context such as advocacy, intermediaries, capacity building and trainings and, inter-organisational networks.

#### Advocacy

#### Health promotion activities

Some of the identified studies reported targeted health promotion activities alongside the MHPSS interventions implemented. In a qualitative evaluation of an MHPSS intervention in Wadi Khaled, Lebanon, set up by MSF, open groups were facilitated in various locations to raise awareness of mental health issues and facilitate self-help skills and self-referral to the established mental health clinics (60). During UNHCR's MHPSS programme in Syria, psychosocial community outreach was an integral part of the intervention. Trained volunteers facilitated community meetings to raise awareness and conducted home visits to identify people in need who were vulnerable but reluctant to seek help. The programme sought to harness and value existing community resources by training people from the community and using existing networks for targeted

communication. The complementary community engagement activities aimed to reduce stigma, social isolation and barriers to accessing other established specialist mental health services (66). In a randomised controlled trial of a WHO-developed self-guided computer-based intervention for depression among Syrian refugees in Lebanon, Cuijpers et al. described the use of social media platforms such as Instagram, Facebook and WhatsApp to promote the intervention. Meetings were held with community-based groups of Syrian refugees, who used WhatsApp to disseminate information to other community members. Interested individuals could then access further online material on the intervention's website or application, where more information was available in the form of videos (53)

#### Engagement with government and religious authorities

Engagement and networking with community leaders, government officials, and other authorities are another important factor, closely linked to the health promotion activities described above. Good relations with community authorities are essential to maintain operations and reduce risks to staff during conflict (84). During an intervention study for Syrian refugees, the implementers provided psychoeducation not only to the participants, but also to imams, village leaders, politicians and women with extensive social networks (44). In another qualitative study that interviewed MHPSS service providers, beneficiaries, and members of an established technical working group, the three groups agreed on the importance of involving community leaders such as religious authorities, school principals and camp representatives to improve the acceptability of services and awareness of mental health issue (61). A positive example of how local people can be empowered to engage with key authorities themselves can be found in the report of UNHCR's interventions in Syria. The trained community workers became respected advocates and were able to meet with members of parliament, national and international representatives of various organisations, and even foreign ambassadors. The report describes how their communication, spirit and determination impressed these key decision-makers, and how this facilitated sustained funding and political support for the intervention (68). The importance of political advocacy is also illustrated by the scaling-up evaluation of the Problem Management+ intervention in Jordan. The right political momentum and increased political awareness and priority for mental health problems at government level were described as factors contributing to scalingup (38).

### Inter-organisational integration of services

Collaboration between NGOs and organisations can improve the effective and sustainable implementation of interventions, while fragmented, uncoordinated interventions can lead to a patchwork of overlapping services of low quality.

#### Engagement with healthcare leaders

Not only politicians, but also health care leaders may be important for networking to facilitate collaboration and referral networks. Hijazi et al. describe how the International Medical Corps (IMC), an American humanitarian organisation, ran one-day training sessions for clinic managers across Lebanon to promote the integration of their mental health interventions into primary care. Implementers described that it was not enough to train frontline workers, but that hospital managers also needed to be committed (49).

#### Fragmentation of services and its consequences

Interviews with MHPSS providers revealed that in north-west Syria they felt that there were many programmes, but not enough effort to coordinate services, and little effective integration between different interventions (61). In the context of serving Syrian refugees in Jordan, informants described major shortcomings in the mainstreaming of different MHPSS interventions, with poor communication between different NGOs and between NGOs and government institutions. Participants advocated for better and more transparent coordination to truly meet the needs of the population and avoid duplication of services (38).

#### Collaboration and service mapping

Several studies described approaches to improve the integration and mainstreaming of MHPSS activities provided. In Syria a technical working group on MHPSS was formed, consisting of mental health professionals and representatives of the various active NGOs. The group aimed to avoid fragmentation and duplication and to ensure sustainable, high quality MHPSS services (61). In Lebanon, Cuijpers et al. created a MHPSS task force through a network of NGOs and UN agencies working in the area, and coordinated meetings with these actors and Syrian community representatives to inform them of interventions (53). In their efforts to integrate mental health services into the Lebanese primary health care system, the IMC provided a training programme and aimed to establish a sustainable referral system. In their described approach, they established a referral network and a referral document mapping the MHPSS services of NGOs and partner clinics in different areas of the country was distributed to primary health care providers, the Ministry of Health (MoH) and NGOs (49). This mapping of services in Jordan was also referred to by Woodward et al. (38).

#### Assessment and validation

#### Assessment studies

Many publications described evaluation studies that preceded the interventions themselves (36,45,47,55,71,75). Studies across different interventions used focus group discussions to assess themes and perceptions surrounding the acceptability of interventions (36,45,57) and one study described a more extensive cultural adaptation process consisting of literature reviews, focus group discussions, and interviews with Syrian and Turkish psychiatrists (54). Those studies relying on quantitative assessments

only used adverse events to assess safety, recruitment and retention rates to measure feasibility, and the percentage of participants completing the intervention (attending three or more sessions) to measure acceptability of the intervention (47,48). Findings from evaluation studies showed that having the therapy delivered by someone from the same ethnic and religious background and respecting certain cultural norms made the intervention more acceptable, and that interventions could be delivered by people with different levels of professional medical training and still be perceived as appropriate (75).

One example of a comprehensive qualitative assessment was given in a study on psychological interventions delivered by trained lay workers in southern Iraq. The authors conducted a qualitative assessment with people affected by war-related violence, and used the data to develop tailored dysfunction scales for men and women separately (45). The full qualitative assessment was published in a separate research report and recommended the training of community health workers and community outreach (86). Based on their experience, the same working group has developed a manual for programme implementers that details how to conduct a proper qualitative assessment with survivors of trauma and torture in low-income countries. The manual is publicly available from the Johns Hopkins Centre for Humanitarian Health. (87).

#### Validation of tools

To obtain robust results, it is not enough to have a good understanding of the cultural context of the intervention; data collection instruments may also need to be adapted and validated for other languages and contexts. While some studies reported the development of new questionnaires or the validation of existing data collection instruments (45,55), other studies reported the lack thereof as limitation. Akhtar et al. discussed that in their evaluation of gPM+, not all outcomes were validated for use with refugees in Syria, a common problem in global mental health research (48). Similar problems were discussed for the same intervention in the context of Jordan. The authors noted that while the Hopkins Symptom Checklist-25 for depression and anxiety, the WHO Disability Assessment Schedule, the Psychological Outcome Profiles and the Posttraumatic Stress Disorder Checklist have been validated for Syrian refugees, other outcome measures such as the Prodromal Questionnaire16 and the PG-13 for prolonged grief disorder have not been validated in Arabic-speaking populations (37).

#### Capacity building

Building the capacity of healthcare workers and/or training of lay workers can be important bridging factors in global mental health interventions.

Two core themes related to capacity building emerged from the literature: the provision of training for existing health professionals, and the training of lay workers to deliver interventions and take over certain tasks (task sharing). Both examples can be found in UNHCR's response in Syria which has been based on capacity building for health

professionals, as well as the training of lay workers with no previous experience in providing health services. More than 350 frontline staff were trained in psychological first aid, 23 psychosocial outreach volunteers and 60 community volunteers were trained (see figure 7)(66).

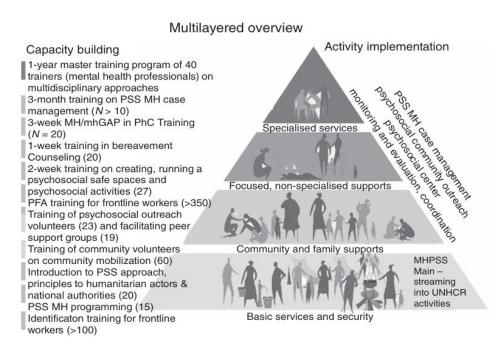


Figure 7: Services in Syria structured into the MHPSS pyramid (Quosh et al. (66))

#### Task-sharing

Several studies described interventions delivered by lay-workers who are trained and supervised but did not have formal mental health qualifications (36–38,45,48,58,61). One example of task-sharing are WHO developed gPM+ (36,37,47,74) and PM+ (38). The positive impact of task-sharing on acceptability, accessibility, opportunities for scaling-up, and sustainability were consistently discussed findings across studies. In a qualitative evaluation of MHPSS interventions in north-west Syria, the training of community health workers was a driver of the quality and acceptability of interventions, and community involvement in the process of planning and implementing programmes was an important determinant of sustainability (61). In a psychological therapy intervention for Syrians in Lebanon, training and supervising non-specialist workers to become psychosocial counsellors was identified as key to overcoming the shortage of mental health professionals in the country. An important factor in maintaining the quality of delegated service was not only the quality of the training, but also ongoing supervision by experts, sometimes based abroad (77). In a community-based intervention for trauma survivors in southern Iraq, trained community mental health

workers were the providers of the intervention. They received 10 days of training in the used approach, followed by group practice and ongoing supervision by two local psychiatrists. To ensure quality, each health worker had to complete at least one case under direct supervision (45).

Training non-specialist staff to deliver psychological therapies can also be challenging. Woodward et al. found conflicting evidence about whether lay people would legally be allowed to provide psychological counselling in Jordan. Some respondents stated that only qualified mental health professionals would be allowed to do so, while several others were unaware of any problems. The role of psychiatric diagnosis versus the provision of mental health care in a non-clinical setting was also described as a factor influencing this issue. The question of whether Syrians with refugee status would be allowed to train and work as lay counsellors was also discussed controversially among participants. Two clear challenges identified were the high workload and low retention of non-specialist workers, and the need and potential lack of qualified supervisors for the large number of lay workers (38).

#### Training activities

Task-sharing with lay workers, is to be distinguished from training healthcare workers with varying levels of experience. For NET for Syrians in Jordan, implementers concluded that different levels of workers, from those with little training to those with extensive training, could deliver the intervention effectively, but that psychiatric nurses would be the most appropriate group, as they are usually used to close contact with patients and have the skills to respond to critical events (75). As a result, they decided to train healthcare workers (nurses) to deliver the intervention instead of using lay-workers.

Several studies mentioned the Mental Health Gap Action Programme (mhGAP). The mhGAP programme aims to scale up services for mental, neurological and substance use disorders in low- and middle-income countries by providing evidence-based guidelines and tools for non-specialist health care providers (88). The UNCHR programmes in Syria trained 20 general practitioners in mental health using the WHO mhGAP approach. Bou-Orm et al. interviewed mhGAP doctors and mental health coordinators of different MHPSS programs in Syria, who emphasised on the importance of mhGAP trainings and protocols. One coordinator was cited: "mhGAP training was necessary to address the shortage of specialized mental health professionals and the growing number of needs." (61).

#### Integration into primary healthcare

Training activities are often linked to integration into primary healthcare, to ensure the sustainability of services. At the end of the UNHCR training activities in Syria, the established case management system was transferred to regular primary health care through the Syrian Arab Red Crescent (66). In Lebanon, International Medical Corps described extensive efforts to integrate mental health into primary health care. More

than 152 primary health care providers (general practitioners, nurses and social workers) have successfully completed the mental health training programme implemented, and the vast majority have demonstrated the required competencies (49). MSF's intervention in Lebanon also identified the integration of mental health into primary care as crucial for successful health promotion, prevention and treatment of mental illness, and community access (72). Similar observations were made in a mixed-methods evaluation in Syria. Participants perceived the use of primary health care to address mental health issues as reducing stigma and barriers (61). One study recommended that the PM+ approach used should be integrated not only into primary health care, but also into the educational system as part of the curriculum for psychology studies in Jordan (38).

#### Innovation factors

Innovation factors are characteristic of the implementation itself and include elements that make the implementation innovative, such as the use of new approaches with real benefits, complexity, but also adaptability and compatibility with the local context.

#### Adaptability of the intervention

#### Cultural adaptation

As described above, several exploratory studies aimed to understand the local context in depth and adapt the intervention accordingly (36,45,47,55,71,75).

#### Idioms of stress and mental illness

Several publications described how an assessment process first identified idioms and cultural concepts, which were then used in the intervention and in the translation of manuals (45,54,66). During the implementation of CA-CBT for Syrians in Turkey, following an assessment process, the treatment manual was reviewed and adapted according to the findings. Metaphors and analogies commonly used in Syrian culture were included, and the language was adapted to include local expressions of stress and mental illness. Culturally related syndromes were considered and explanatory models of the treatment approach were adapted to local understandings of body and mind (54). The treatment manuals were based on a similar culturally adapted manual, validated for work with traumatised Egyptians, which is available online (89). Among many other examples the authors discuss how catastrophic cognitive misinterpretations can be based on shared cultural beliefs and how concepts from modern cognitive behaviour and schema therapy such as mindfulness, loving-kindness, or the "inner child" can be adapted for Muslim populations (89). For their internet-based psychotherapy intervention study, the research group at the Treatment Centre for Victims of Torture in Berlin created an online website in Arabic, which was further culturally adapted for use in Iraq and offers screening tools, informational videos and three free treatment courses (71).

#### Ethnic and linguistic minorities

Working with ethnic minority groups can be particularly challenging in terms of cultural adaptation and may require even more detailed efforts. In a cross-sectional survey of Yazidis in Iraq, the questionnaire was translated not only into Arabic but also into the Kurdish Kurmanji dialect. In addition, all researchers conducting data collection and interviews were fluent in both Arabic and Kurdish (78). Working with therapists from the same cultural and linguistic background has also been described to increase acceptability among participants in a NET trial for Syrians in Jordan. As cultural adaptation is an ongoing process, it may also be important not only to use culturally adapted methods prior to implementation, but also to repeatedly assess their acceptability in the implementation and sustainability phases. For example, in a qualitative evaluation, participants reported positively on the context, format, and appropriateness of gPM+ (36).

#### Innovation characteristics

#### Group therapy

Multiple publications described the implementation of MHPSS group interventions in Iraq or Syria (36–38,46,47,68) and discussed the manyfold advantages of group therapies. In addition to being cost effective, further unique treatment mechanisms and challenges were reported. In a qualitative analysis of gPM+ in Turkey, some of the Syrian participants reported how listening helped them to cope with their own similar problems, while others reported feelings of stress and anxiety when listening to the group members' stories (36). Providing family support groups motivated participants to attend regularly and reduced fears of stigmatisation (36). The evaluation of individual PM+ in Jordan showed that some participants felt that a group version would have been more feasible and culturally acceptable. To reduce stigma, they recommended using groups as a way of framing participation in the intervention as an altruistic act to help others, rather than a sign of weakness (38).

#### Tele-counselling

Telemedicine has the potential to facilitate access to healthcare in remote or underserved areas during conflict. In a feasibility trial of telephone counselling, the intervention was able to overcome logistical barriers such as poor transport and infrastructure. In addition, the intervention was described as more acceptable because receiving counselling from a private space was perceived as less stigmatising (77). During UNHCR's operations in Syria, the expansion of telephone call tracking and a 24/7 emergency hotline was facilitated by recurring access problems during ongoing fighting (66). Another potential application of telemedicine is remote support for local mental health professionals through video calls with experts abroad. For example, a report in the Journal of Telemedicine and Telecare describes how an Arabic-speaking US-based psychiatrist provided telepsychiatry consultations during the Syrian civil war, despite the limitations of heavy workloads, the availability of local psychiatrists, and poor internet

connectivity. A 'store-and-forward' approach, also called 'asynchronous telepsychiatry', was described as a potential solution for internet bandwidth problems (67).

#### Digital interventions

Several studies described the implementation of digital, computer-based interventions (53,55,67,71). The WHO-developed Step-by-Step intervention provides psychological support through structured, stress-reducing activities and could be delivered via any internet-connected device. Cuijpers et al. found it effective in reducing depression among Syrian refugees in Lebanon but noted digital access as a potential limitation (53). Delivering part of the intervention through digital illustrations and audio recordings was also described as beneficial in another self-help intervention for Syrians in Turkey, as it improved reliability and reduced the amount of supervision needed (51). A study for people with PTSD in Iraq was delivered entirely online. The safety of accessing therapy from home was perceived as stigma reducing and it was concluded that "the anonymity of the Internet thus seems to offer this vulnerable group of patients new possibilities to disclose traumatic events in a safe environment." (71). Although it was reported that the number of Iraqis with access to the internet and familiarity with using the internet to access security information was higher than expected, frequent power cuts and technical problems were limitations (71). Two other publications mentioned the possibility of adapting the described approach to a digital format in the future. Some implementers of PM+ in Jordan felt that an online component might reduce stigma and logistical problems, but could be limited by unreliable internet access (38). A trial of NET noted the stigma-reducing potential of online therapy, suggesting that although the intervention was delivered in person, it could be safely adapted to an electronic version (e-NET) to overcome access barriers, stigma, and privacy issues in remote areas (75). Guidelines for e-NET were provided by other colleagues and cited in the discussion (75,90)

#### Attention to severe mental health disorders

Some studies have raised concerns that interventions may not be sufficient to address severe mental illness. At 3-month follow-up, the gPM+ intervention group was able to reduce symptoms of depression, but showed no significant effect on PTSD, disability or child mental health problems as outcomes, despite the fact that almost two-thirds of the population met criteria for PTSD (37). The authors discussed the inclusion of an additional trauma processing module in the model for future implementation in similar settings. A major limitation of comprehensive mental health care is that none of the identified studies included interventions for people with severe mental disorders, such as schizophrenia, bipolar disorder, or emotionally unstable personality disorder.

#### Real world long-term effectiveness of interventions

The success of an intervention depends on its ability to produce real, relevant and sustainable effects. However, several studies have raised concerns about the sustainability of treatment effects when patients remain in challenging environments,

with two studies reporting that participants did not maintain significant improvements in depression or anxiety symptoms at 12-month follow-up compared with their progress at three months (56,74). For gPM+ it was discussed that short-term interventions delivered by non-specialist workers may not be sufficient to produce long-term improvements in mental health outcomes. The authors felt a need for sustained and ongoing programmes including the use of booster sessions to refresh learned techniques and prevent relapse of mental health problems (74). Another limitation was that while an intervention like gPM+ may improve milder symptoms, it may not be sufficient for severe disorders. Additional community-based and family-level interventions, and a stepped-care approach that identifies severe cases and provides more specialised treatment where needed were discussed as solutions (56,74).

#### Economic analysis

As political commitment and momentum are crucial for scaling up MHPSS interventions, economic cost-benefit calculations can be important arguments to convince policymakers of the rationale for implementation. In a qualitative study, participants involved in the implementation of PM+ in Jordan confirmed that demonstrating cost-effectiveness was an important factor in gaining support and funding from government and international donors (38). Only one study conducted a comprehensive separate cost-effectiveness analysis and found that SH+ for Syrian refugees in Turkey had a 97,5% chance of being cost-effective (73).

## 4 Discussion

The objective of this thesis was to identify and analyse the themes underlying the determinants of the effective, sustainable and acceptable implementation of MHPSS interventions for the populations of Iraq and Syria, and to integrate them into an adapted implementation science framework. The findings were synthesised into 14 themes that implementers should be aware of at all stages of implementation. These themes were structured according to the four domains of the EPIS framework. Several of the emerging themes should be highlighted because of their relevance and interconnectedness: The understanding of cultural factors (particularly religion and gender), the internal context of the implementing organisation, the use of advocacy and capacity building as bridging factors, and the innovative characteristics and adaptability of the intervention. There is a complex interplay between these factors.

Firstly, the role of cultural factors and their influence on stigma and mental health seeking behaviour cannot be overemphasised and the findings implied that narratives around mental health must be understood in depths for a mental health intervention to be acceptable and effective. Several studies have reported fear of shame and stigma as reasons for low uptake. One way to approach this could be to reduce the labelling of projects, facilities and clinics as 'psychiatric care' or 'mental health intervention'. The idea of reducing visibility can be seen as a double-edged issue, as the aim should not be to reduce visibility but to increase understanding, through proper trust building, community engagement and adaptation. It became evident that in the context of Iraq and Syria, an understanding of religious cultural factors is crucial, as stigma was often found to be linked to religious or spiritual beliefs. These findings are in line with findings among Muslim population in other contexts. In an explorative study among Muslim patients in a psychiatric outpatient population in the Netherlands 43% of patients believed that their symptoms were caused by Jinn, suggesting that the concept should be seen as an important idiom of stress and mental illness (91). The impact of religious beliefs on the acceptability of an intervention should be carefully considered when researching and preparing an MHPSS programme. Rather than seeing religious perceptions as barriers to mental health care, they could be used as resources. An example of this can be found in the Cultural-Adapted-CBT manual by Jalal et al. (89). In the manual, the concepts of cultural grounding and explanatory model bridging are used to adapt concepts of Cognitive Behavioural Therapy into a Muslim Arab cultural framework. On the other hand, even in a context that may share certain characteristics ascribed to 'Arab' or 'Muslim' culture, nuanced differences may apply, and those studies that paid more attention to cultural details reported improved acceptability. For example, in the online intervention by Cuijpers et al., participants were able to choose their avatar in the online intervention according to the main target cultural groups in the country (Syrian, Lebanese, Palestinian), and details related to small differences in culture and language between these groups, but also related to gender differences or

unmarried people were taken into account (53). An example of a lack of cultural understanding is illustrated by the Eurocentric viewpoint reported by Weiss et al., who discussed how their intervention was delayed by Ramadan (45). A better cultural understanding of the context could have probably avoided this problem, or even used it as a resource.

Awareness of discrimination and stigma, and appropriate language are influenced by the outer context but already start within the implementing organisation itself. For PM+ the use of non-discriminatory and non-stigmatising positive language and confidentiality in unmarked facilities were two approaches towards reducing stigma (38). Several studies aimed to address gender-related issues in terms of engagement in research, but also gender-related stigma. This trend is in line with current research efforts focusing on understanding gender disparities in mental health generally, but also in other medical disciplines (92). Researchers are exploring gender bias in medical research and practice, and advocate for more inclusive clinical trials and healthcare policies that address the needs of diverse populations (93). No studies included in this review reported on the difficulties faced by the gender diverse or wider LGBTQ+ community, indicating a lack of visibility around this issue. Discrimination and violence against people who identify as LGBTQ+ is high around the world and has an impact on people's mental health. Implementing organisations such as NGOs can address this by raising awareness again ideally starting within an intra-organisational context. For example, LGBTQ+ inclusion workshops to promote cultural competence among staff, using a Values Clarification and Attitude Transformation (VCAT) methodology, are used in some projects, often in countries where the issue remains highly sensitive. Throughout an intervention the implementing organisation should ask itself who might be left out due to discrimination and stigma and which groups (women, men, children, minority groups) face particular problems of access.

Although the outer cultural context was found to be crucial, equal emphasis should be given to the socio-economic-political environment of the intervention. An unstable security situation can make access difficult for staff and beneficiaries alike and directly impair mental health outcomes. The ability of the implementing organisation to influence a war or ongoing conflict at the political level may be limited, but advocacy through speaking out and providing testimony can still make a small contribution. One example is MSF's active media campaign and repeated calls for an immediate ceasefire during the current war in Gaza (94). Beyond the attempt to advocate for peace, there are other implications of the security context of MHPSS interventions. Context or risk analysis and the establishment of security guidelines are considered essential to the planning of any humanitarian intervention. This is relevant not only in the preparation phase, but also during implementation and sustainability, as security incidents are monitored and documented. If access is not possible, even the most elaborate evidence-based psychological interventions will not have any impact. Sadly, in recent conflicts around the world, local authorities have denied entry for workers or restricted

the delivery of critical medical supplies, as is currently the case in Sudan, or health facilities have been deliberately targeted, as in Gaza, where at least five MSF staff have been killed between the beginning of the current war and June 2024. Nevertheless, detailed briefing of national and international staff and a detailed understanding of risk situations are directly linked to the working culture, behaviour in the field and good mental health of staff.

Although it is clearly established that low socioeconomic status is associated with poorer mental health outcomes, it is less clear that improving mental health will have a positive impact on socioeconomic status. Some interventions have been found to improve mental health outcomes without improving the socioeconomic situation of participants. Potential legal and structural barriers to income generation and employment may need to be addressed separately. These barriers might be addressed by advocating for the rights of beneficiaries at a higher level (e.g. government), which will have an impact beyond the scope of the intervention.

While advocacy and health promotion aim to increase community acceptance and participation, direct capacity building was found to be the most important bridging factor between implementers and the community. The leading question could be how local resources and capacities are strengthened by the intervention. Capacity building comprises direct training activities, for example training primary healthcare practitioners in the mhGAP program, but also task-sharing of activities to non-professional lay workers. This trend of task-sharing is reflected in the recommendations of the Lancet Commission on Global Mental Health, which identified task-sharing of psychosocial interventions and the implementation of community-based interventions as two of the top four innovations to be promoted in global mental health (95). They address the shortage of mental health professionals and enable wider access to mental health services, especially in low-resource settings. In addition, this approach can empower communities by building local capacity and reducing stigma. Capacity building and task-sharing can be seen as bridging as well as an internal context factors. Durlak et al. describe shared decision-making, as in community participation and local ownership, as an important intra-organisational method that leads to better implementation of health interventions in different sectors (40). In a recent commentary, Lancet commission chair Vikram Patel, author of the book "Where there is no psychiatrist", points out how the evidence from task-sharing interventions in low-income settings could even transform the provision of mental health care more generally (96). Certain mental health interventions may be effective under controlled conditions, delivered by highly specialised providers, but fail to demonstrate lasting positive impact in the real world due to limitations in scale-up, accessibility and sustainability. As mentioned above, task-sharing interventions are one way of scaling up sustainable access to mental health. They can be combined with group approaches which have been shown to be cost and time effective and potentially reduce stigma. One example is the WHO developed gPM+ intervention. For gPM+, Bryant et al. discussed that group programmes

may be more cost-effective, especially when delivered by trained lay workers. This may improve scalability, accessibility and the likelihood of sustainable implementation in a range of low-resource settings (37).

Regarding the internal context of the implementing organisation project planning processes were directly linked to staff satisfaction. The way NGOs plan their interventions affects the acceptance, commitment and sustainability of their efforts. Many organisations, follow 6- or 12-month cyclical planning and funding cycles, which can create uncertainty and disrupt services. For an organisation like MSF approximately 90% of project employees are local staff (33) and ensuring job security, satisfaction, and an adequate working environment were found to be important internal context factors. For humanitarian workers generally, a high effort-reward imbalance (high work effort and low rewards) has been shown to be associated with high levels of burnout symptoms such as emotional exhaustion and depersonalisation (83). One limitation in the identified literature was that no studies addressed the consequences for the mental health of humanitarian workers exposed to violence in the context of Iraq and Syria. For another context, Strohmeier et al. reported high levels of mental health problems among national humanitarian workers exposed to primary or secondary traumatic experiences in South Sudan (97). In a separate publication, the authors found that national staff prioritized training and career opportunities, whereas international staff valued stress relief and recreational activities. They concluded that organisations should provide sufficient psychosocial support to address the differing priorities and needs of both national and international staff (98).

The internal context of an organisation shapes its public image, especially in conflict zones like Syria and Iraq, where implementing agencies were sometimes suspected of links to foreign intelligence services such as the CIA or Mossad. Due to decades of war and foreign intervention, there is widespread mistrust, so agencies must provide special protections for national staff who may be seen as collaborators and recognize that providing impartial care can lead to being perceived as an enemy. During my time with MSF in Tigray, Ethiopia, I learned about many well documented past difficulties in relations with the government because MSF had provided medical care to perceived political enemies. The result was even a temporary total suspension of all activities in the country in 2021(99). In the book "Saving Lives and Staying Alive - Humanitarian Security in the Age of Risk Management", the authors describe how the acceptance of interventions and the public image of the implementing organisation are shaped by the networking and personal contacts of the programme coordinators, and how this influences the implementation and safety of operations (84). Efforts to mitigate public image issues could include strong advocacy, including community engagement and media campaigns, networking and programme consistency. These advocacy elements can be seen as the key bridging factor between the internal and external context in the implementation process. Across the studies, the range of stakeholders successfully

involved in advocacy included village authorities, health leaders, women with extensive networks and religious authorities.

The EPIS framework proved to be partially appropriate for the purposes of this study. A strength of the framework was that it provided a useful structure to approach the thematic analysis in a systematic way, while adapting it in an iterative process. Combined with the objectives, it also provided a useful framework for developing relevant recommendations. A limitation was that it was difficult to clearly show the interconnectedness between the different areas of the framework. As discussed above, many issues were interdependent, which was difficult to visualise within the framework. A more layered or dimensional approach might be useful for similar studies in the future. Which approach to choose might depend on the position from which one approaches implementation. For example, for an international NGO, the internal context might be seen as the base upon which all other layers would be built. Only if the organisation is seen as a credible actor with real long-term commitment, it may be able to really immerse itself in the local context, advocate, and build local capacity. A potential weakness of this work is my positionality as a person working with MSF, with no experience of working in a similar setting from other perspectives (e.g. public sector, community-based initiatives). This review has other strengths and weaknesses. All publications included were published in English in peer-reviewed international journals or grey literature reports from international organisations. It is therefore possible that many findings from grassroots community-based organisations were only available in Arabic or were not published at all. On the other hand, the publications included represent both regional and Western academic institutions and include RCTs, qualitative evaluations and grey literature. This review is the first to systematically synthesise and thematically analyse findings from these sources using an implementation science framework, resulting in a strong focus on real-world implementation of MHPSS interventions. Due to my own position, and the focus on external organisations implementing interventions rather than community initiatives, the recommendations below are specifically aimed at decision-makers and implementers from international non-governmental organisations.

Potential areas for future research were identified in several areas. Research should continue to focus on the development and testing of culturally sensitive, scalable and cost-effective intervention models. Another open question is how to better engage men in mental health interventions and whether this might have a positive impact on gender-based violence and stigma against women seeking mental health care. The mental health of national and international humanitarian workers and its impact on sustainable project implementation is another under-researched area, as are the areas of MHPSS interventions for severe mental disorders and substance use disorders during conflict. The momentum of up-scaling task-sharing interventions should be used to advocate for cost-effective mental health care at multiple levels (community, government, NGO).

## 5 Conclusion and recommendations

All four identified domains of the EPIS framework are relevant to the successful implementation of MHPSS interventions in the context of conflicts in Iraq and Syria. Essentially, implementers can ask themselves several questions on how factors from the different domains (external context, internal context, bridging factors, innovation factors) affect the effective, sustainable, and acceptable implementation of the intervention at different stages. Tables seven to nine provide a conclusive overview of questions deriving from the findings of this review, which implementers can address to ensure that effective, acceptable, and sustainable implementation is ensured across all four domains of the EPIS framework.

Effective implementation			
Outer context	Outer context analysis: Socio-economic problems, security situation: What are the		
	prospects in terms of political situation and security?		
	Is the staff aware of security issues and implications?		
	Does the intervention take account of minority groups, gender? Who is left out?		
	Ongoing conflict: What is the impact on patients' mental health?		
Inner context	What is the working culture of my organisation? Is feedback valued?		
	Is the mental health of employees assessed?		
	What is the level of psychosocial support?		
Bridging factors	Inter-organisational cooperation: Is there cooperation and integration with other		
	stakeholders? Is duplication of services avoided? If waitlist-controlled data is		
	collected, am I sure participants do not receive treatment elsewhere?		
	Are services integrated into existing systems (e.g. PHC)?		
Innovation factors	Economic analysis: Will data be collected for cost-benefit analysis?		
	Innovation characteristics: Does the intervention meet a real need? Who is left out?		
	Are referal pathways established?		

Table 7: Questions to assess effectiveness in different domains

Acceptable implementation			
Outer context	Stigma: What are the local narratives around mental health?		
	What are the expectations of mental health services? What is done to reduce stigma?		
	How does the local cultural and religious context influence health-seeking		
	behaviour?		
Inner context	What is my organisation's public image? What are the organisation's values?		
	Is non-discriminatory language used within the oragnisation?		
	Is all work confidential?		
Bridging factors	How does the intervention work with community networks and authorities?		
	Does health promotion address stigma? Family engagement?		
	Is community knowledge valued? Is advocacy at government level established?		
	Has an assessment/feasibility study been conducted?		
Innovation factors	Adaptability: Is the intervention adapted to the local cultural context? Have the tools		
	been interculturally validated? Is there a qualitative understanding of the context?		

Table 8: Questions to assess acceptability in different domains

Sustainable implementation		
Outer context	What are the barriers to access? Are structural inequalities being addressed?	
	Are transport costs covered? Provision of vocational opportunities?	
	Has the legal situation in the host country been analysed?	
Inner context	Project planning processes: What does the intervention depend on (funding)? What is	
	the exit or handover strategy? Is long-term commitment secured?	
	Does it adequately address support and prospects for national and international	
	staff?	
Bridging factors	Capacity building and task-sharing: What local resources and capacities are	
	strengthened by the intervention?	
	Are there structures for community and staff feedback?	
Innovation factors	Is the intervention continuously adaptable and open to feedback?	
	Is the intervention based on cost-effective innovations (group therapy, digital	
	interventions, task-sharing)? Are innovative approaches used for long-term support	
	(telemedicine, digital support)?	

Table 9: Questions to assess sustainability in different domains

In conclusion, the findings underline the importance of a truly innovative intervention based on the analysis of the internal context of the implementing organisation as well as the external context of the intervention (socio-economic-political and cultural-religious context), and the importance to prioritise community engagement, advocacy, and capacity building. Based on the findings of this review, several recommendations can be made for actions to be prioritised. Due to the nature of the publications included and my own positionality, these recommendations are addressed to implementing coordinators of international NGOs active in the region of interest.

First, the implementing organisation should consider whether structural barriers and inequalities are sufficiently addressed and whether there is a sound understanding of the legal situation in the host country. Examples of addressing these barriers could include providing free transport, income-generating opportunities or training programmes as part of an intervention. To fully understand the external context, it is strongly recommended that a qualitative formative study is carried out according to established standards. To ensure quality, the evaluation should be triangulated and assess the perceptions of beneficiaries, health workers, government officials, cultural and religious key informants, and others. Intervention manuals should then be adapted in a structured manner, using the identified idioms of stress and mental health, and ideally using validated assessment tools. Manuals should be shared and open for community feedback throughout the intervention. Advocacy and health promotion programmes should be established at different levels. To ensure sustainability, interventions focusing on task-sharing and capacity building should be prioritised, and success could be operationalised by monitoring the number of trainings delivered and structured skills assessment of trained staff. It is highly recommended to integrate services with other actors (NGOs, MoH), and operationalise service mapping and structured regional referral pathways.

Especially an international organisation should be aware of its own internal context, culture, and public image. Behavioural workshops on non-discriminatory language and cultural awareness could be set up and monitored by numbers of participants. In terms of project planning, long-term commitment should be prioritised over short-term planning cycles and, where appropriate, a handover or exit strategy should be established from the start of the planning process. There should be structures for staff feedback to monitor satisfaction and the need for psychosocial support. Throughout an intervention, the implementing organisation should ask itself who may be excluded due to discrimination and stigma, and which groups (women, men, children, minority groups) face particular problems of access. This could be operationalised through subgroup analysis of MHPSS programme outcomes. Gender and gender-based violence need to be considered in interventions, with measures such as involving families in therapy and awareness campaigns on the stigma of sexual violence.

Finally, the above-mentioned research gaps on staff mental health, severe mental disorders, and substance use disorders in conflict should be addressed. To address the potential publication bias between international organisations and grassroots initiatives, community-based organisations should be encouraged to publish and interact with international actors. Increased funding and support for community-based mental health initiatives would be desirable to ensure sustainable improvements. By addressing the questions and recommendations derived from the findings of this review, MHPSS interventions can become more effective, acceptable and sustainable, and improve the mental health of conflict-affected populations in Iraq and Syria.

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## **Appendices**

## Appendix 1: IASC guidelines

The Inter-Agency Standing Committee (IASC), established in 1991, worked with the United Nations and other humanitarian actors to develop evidence-based guidelines for MHPSS in emergencies (43). The guidelines emphasise on the importance of immediate psychosocial support, validated interventions and six core principles: Human rights and justice, participation, prevention of harm, use of existing resources, integrated support systems, and multi-level support. These principles aim to maintain social cohesion, ensure cultural sensitivity and promote the sustainability and effectiveness of interventions. The supposed interventions are structured in a multi-layered way, from basic services to community support to specialised care, and are symbolised in a pyramid structure. One core principle is that psychosocial support at the outset of an emergency is crucial to maintaining mental health and psychosocial well-being and preventing the exacerbation of pre-existing mental health problems. The guidelines recommend mental health and psychosocial interventions that have been validated for different contexts and regions (43).

The guidelines established six core principles which are used as conceptual base for MHPSS interventions:

- **1. Human rights and equity:** All interventions should be human rights based. All affected people, regardless of gender, age, ethnicity or other criteria, have the same rights to access mental health care and psychosocial support programmes. Not all groups have the same resources, so specific marginalised and discriminated groups may be entitled to special consideration to promote equity.
- **2. Participation:** All interventions should emphasise the participation of local communities. Many of the best coping strategies are already embedded in local culture and should be strengthened and maintained during emergencies. A large number of people may be resilient enough to participate in the planning and implementation of emergency relief efforts. Local communities should be empowered and given a sense of ownership of established interventions to promote sustainability.
- **3. Do no harm:** This core principle of medical ethics should also apply to emergency relief. Humanitarian work in general, and psychosocial programmes in particular, have the potential to cause harm because they deal with highly sensitive cultural contexts. Participation, a strong evidence base, qualitative research on cultural sensitivity, coordination, and ongoing evaluation and monitoring of programmes could help to ensure that harm is not done.
- **4. Building on available resources and capacities:** As described in point two, all cultures and affected people have pre-existing resources and capacities to maintain

social cohesion and psychological well-being in times of crisis. All levels of MHPSS interventions identify and strengthen existing resources.

- **5. Integrated support systems:** Fragmentation of health services should be avoided. Interventions should not separate different affected groups from each other, but emphasise activities that are part of larger systems and the community. This will promote sustainability and destigmatisation.
- **6. Multi-layered supports:** As described above, people are affected differently in an emergency and will express different levels of resilience. Interventions should be organised to address all levels of need in a complementary manner. The different levels can be illustrated by a pyramid, which has become a key tool and symbol of the IASC MHPSS Guidelines. The pyramid describes a base of basic services, followed by community interventions, interventions provided by non-specialist staff, and finally specialised services for people with severe mental disorders.

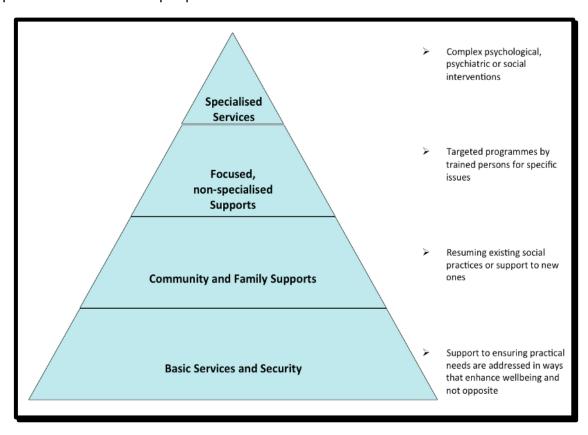


Figure 2: IASC MHPSS Pyramid (IASC, 2007)

## Appendix 2: Phases of the EPIS Framework

The initial exploratory phase includes an assessment of the need, feasibility and appropriateness of a potential intervention. The problems and needs are identified, and the external context is assessed. The organisational context of the implementing organisation and the willingness and support of the stakeholders involved are assessed. A potential innovation or intervention is identified based on need, feasibility and appropriateness. For an implementing humanitarian actor, this may include an initial assessment on the ground in the affected region. The aim of this phase should be to decide whether the proposed evidence-based practice (in this case a psychosocial intervention) has a good chance of being successfully implemented.

The exploratory phase is followed by the preparatory phase, which focuses on planning and preparing for implementation. Key components of this phase include securing resources, advocacy, building infrastructure, training staff and, most importantly, developing sufficient implementation plans and strategies. This phase lays the foundations for successful implementation by ensuring a sufficient budget, staff planning and collaboration with key stakeholders.

During the implementation phase the policy is actively put into practice. The implementation plan is realised, and objectives are monitored according to the logframe. Ongoing training and support is provided, and potential adjustments are made based on feedback. The main objective is to achieve high standards of implementation while continuously adapting to needs.

The final phase, sustainability, focuses on the long-term maintenance and sustainability of the programme. This includes ensuring ongoing support and resources, integrating services into routine practice, providing ongoing training and supervision and, ideally, local ownership of the intervention.

All phases of the EPIS framework build upon each other. The result is a structured and iterative approach to implementation.

## Appendix 3: PubMed search strategy

### Search algorithm (PubMed)

("Armed Conflicts/psychology"[Mesh] OR "Conflict-affected"[Title/Abstract] OR "waraffected"[Title/Abstract] OR "displaced population\*"[Title/Abstract] OR "conflict setting\*"[Title/Abstract] OR "conflict area\*"[Title/Abstract] OR "internally displaced"[Title/Abstract] OR "refugees"[Title/Abstract] OR "humanitarian crisis"[Title/Abstract])

AND ("psychotherapy"[MeSH Terms] OR "intervention"[Title/Abstract] OR "psychosocial support"[Title/Abstract] OR "psychological treatment"[Title/Abstract] OR "psychotherapy"[Title/Abstract])

AND ("Middle East" [MeSH Terms] OR "arab countries" [All Fields] OR "levant" [All Fields] OR ("syria" [MeSH Terms] OR "syria" [All Fields]) OR ("jordan" [MeSH Terms] OR "jordan" [All Fields]) OR ("lebanon" [MeSH Terms] OR "lebanon" [All Fields] OR "lebanon s" [All Fields]) OR "Turkey" [MeSH Terms] OR "turkey" [All Fields] OR "Iraq" [All Fields] OR "Iraq" [MeSH Terms] OR "Iraq War, 2003-2011" [Mesh])

## Appendix 4: Data extraction form

Study	Study	Setting	Population	Intervention	Format	Facilator	Control	Outcome	Outcome	Follow up	Challenges	Facilitators	Link
(author,	design				and				significance				
year)					duration								

## Appendix 5: Codebook

Name	Description
Bridging factors	Elements that connect inner and outer context such as advocacy, intermediaries, capacity building and trainings, interorganisational networks (relationships and collaboration with other organisations).
Engagement with host country structures	
Community engagement	
Engagement with religious authorities	
Government engagement	
Health promotion	
Integration into PHC	
NGO collaboration	
Task-sharing and capacity building	
Inner context	Refer to the internal context of the implementation. This group comprises leadership and support factors, the implementing organisations internal cultures (shared values, beliefs, norms), staff attributes, and intraorganisational infrastructure.
Adaptability of implementing organisation	
Cyclical planning and funding	
Long-term commitment	

Name	Description
Project planning processes	
Public image of implementing organisation	
Working culture	
Innovation factors	Describe characteristics of the intervention itself. Examples are: Real advantage, perceived benefits, complexity, evidence, and comprehensiveness of the implementation, alignment, and adaptability.
Consideration of severe MH disorders	
Cultural adaptation	
Digital interventions	
Economic analysis	
Group therapy	
Real world effectiveness	
Tele-counselling	
Outer context	Describe the external context of the implemented intervention.  These factors include the contextual sociopolitical and economic situation, government regulations, cultural context (predominant attitudes, social norms, religious beliefs), climate, as well as unforeseen outer events (pandemics, natural disaster)
Awareness and expectations	
Covid-19	
Gender	
High mobility	

Name	Description
Host country legal system	
Religion	
Security situation	
Socioeconomic problems	
Stigma	

# Appendix 6: Types of interventions

Intervention	Description
PST-EMDR	An approach in trauma-therapy that involves patients recalling stressful memories while simultaneously focusing on external stimuli, like eye movements, hand-tappings, or audible tones. The dual focus aims to shift the traumatic memories into a more neutral state. The therapy consists of eight phases.
Group Problem Management Plus (gPM+)	A low intensity psychological intervention that was developed by WHO to adress the psychosocial needs of communities affected by adversity and conflict. It is delivered in a group format and teaches practical skills for problem management, stress management, behavioral activation and improving emotional well-being. It can be implemented by non-specialised workers, making it accessible in low-resource settings.
Self-HelpPlus(SH+)	A low intensity psychological intervention that was developed by WHO to support people experiencing stres due to adversity and conflift. It uses audio recordings to guide participants through learning practical skills such stress-management, problem-solving, and emotional regulation. It can be delivered in group settings and only needs very limited support from trained facilitators.
Early Adolescent Skills for Emotions (EASE)	WHO-developed group-based intervention to support young adolescents experiencing emotional distress. EASE is designed for children aged 10-14 and focuses on teaching skills to manage and reduce symptoms of anxiety and depression. The program includes sessions on emotional regulation, problem-solving, relaxation techniques, and accessing social support. It is structured to be delivered by trained facilitators in school or community settings.
Cognitive behavioral Internet-based intervention	Online CBT interventions use the principles of CBT to provide structured help to people with common mental health problems such as anxiety and depression. Negative and dysfunctional thought patterns are identified and changed through structured exercises.
Cognitive processing therapy (CPT)	CPT is a specialised form of CBT developed to treat post-traumatic stress disorder. It is delivered by mental health professionals who help clients identify dysfunctional beliefs about themselves and their trauma, and change maladaptive thoughts known as "stuck points". It aims to create a more balance and appropriate way to think about the traumatic experience.
Common Elements Treatment Approach (CETA)	CETA is typicall delivered by non-specialist workers and was developed for use in low-resource settings. It comprise techniques from various approaches live CBT, exposure therapy, and problem-solving therapy and is designed to be adaptable for different cultural contexts.
Narrative exposure therapy (NET)	NET is a short, evidence based therapeutic intervention for people suffering from complex traumatic experiences. It helps clients to construct an adequate narrative timeline of thei life and to integrate and make sense of traumatic experiences. It involves exposure therapy sessions where clients talk in detail about their traumatic experience and contrast them with their emotions in the present.
Guided "Step-by-Step" intervention	Digital mental health intervention developed by WHO to support clients suffering from depression or anxiety. It consists of digital course based on CBT principles that can be accessed through apps or online plattforms. It only needs minimal support from trainers.
Culturally adapted cognitive behavioral therapy (CA-CBT)	A form of CBT that is spefically adapted to diverse cultaral and religious beliefs, concepts, and values. It involves modyfing established CBT techniques to be more appropriate for specific cultural and religios contexts and make use of cultually appropriate idioms of stress and concepts of health.