

Literature Review of the Factors Influencing Access to Mental Health Treatment Services Among Adults in Conflict-Affected Areas in the Eastern Mediterranean Region



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Literature Review of the Factors Influencing Access to Mental Health Treatment Services Among Adults in Conflict-Affected Areas in the Eastern Mediterranean Region

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by

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Declaration:

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The thesis "Literature Review of the Factors Influencing Access to Mental Health Treatment Services Among Adults in Conflict-Affected Areas in the Eastern Mediterranean Region" is my own work.



Signature:

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Abstract

Introduction: The Eastern Mediterranean region (EMR) is home to several armed conflicts that exacerbate the economic, political and health-related indicators. The burden of mental disorders in these conflict-affected areas is huge while access to mental-health services is limited, resulting in a considerable treatment gap. This study aimed to review the grey and academic literature for the factors influencing access to mental health services among adults in conflict-affected areas of EMR.

Methodology: Google Search, PubMed, VU library and APA PsycInfo were used to search for literature published after 2000. The World Bank's list of Fragile and Conflict-affected Situations was used to include countries in conflict. Andersen's framework was modified to assess the results.

Results: 54 sources were included in this review. Several factors were found to influence access to mental-health services: beliefs and stigma towards mental health; lack of resources; mental-health integration into primary healthcare (PHC); community support; distance, transportation and travel time; and funding for mental health.

Discussion: As mental-health research is insufficient, collaboration between governments, international donors and universities is needed to prioritize mental-health research. The implementation of anti-stigma interventions is challenged by the lack of evidence, cultural insensitivity and disinterest in mental health. Post-conflict governments are recommended to incorporate anti-stigma advocacy into cultural platforms. Integration of mental health into PHC can mitigate resource unavailability and stigma. Context-tailored training should be provided for the most available non-specialized healthcare workers.

Key words: Conflict, mental health, mental health system, access, stigma

Word count: 12,948

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Abbreviations

EMRO: Eastern Mediterranean Region Office

WHO: World Health Organization

EMR: Eastern Mediterranean Region

LMICs: low- and middle-income countries

GDP: gross domestic product

GGHE: general government health expenditure

GGE: general government expenditure

UHC: universal health coverage

OOP: out-of-pocket expenditure

YLDs: years lived with disability

PTSD: post-traumatic stress disorder

SDGs: the sustainable development goals

DSM: Diagnostic and Statistical Manual of Mental Disorders

NGOs: non-governmental organizations

MeSH: Medical Subject Headings

PHC: Primary healthcare

HCWs: healthcare workers

GBV: gender-based violence

COVID-19: Coronavirus disease

CHWs: community health workers

OR: odds ratio

HICs: high-income countries

mhGAP: The WHO Mental Health Gap Action Programme

CFI: Cultural Formulation Guide

Definitions of the Terms Used

- **Access to healthcare:** the overall chance of identifying health needs and the ability to seek, reach, obtain or use healthcare services with the final purpose of fulfilling the healthcare need. Levesque et al. proposed a theoretical framework that is underpinned by five dimensions of accessibility: “Approachability; Acceptability; Availability and accommodation; Affordability; Appropriateness”; and five user abilities: “Ability to perceive; Ability to seek; Ability to reach; Ability to pay; Ability to engage” (1).
- **The adjusted-healthy life expectancy at birth:** mean number of years one person is projected to live, estimated at birth, considering the years he or she might live in less than “full health” because of disease or injury (2).
- **Gross domestic product (GDP):** is the economic value of all the good and services produced within the borders of a country during a certain period of time (e.g. quarter of a year/ 1 year). It is the single most used economic measure (3).
- **National poverty line:** the percentage of population earning or living at less than the national poverty, which is estimated by household surveys by national authorities (4).
- **General government health expenditure (GGHE) as percentage of general government expenditure (GGE):** the percentage of domestic government expenditures on health out of general government expenditure from domestic public resources, and it is used to indicate the extent of government’s prioritization of health (5).
- **Out-of-pocket expenditure:** the percentage that households in a particular country collectively spend on health from their own money (pocket) out of the total current health expenditure (6).
- **Mental disorders:** a combination of abnormal thoughts, perceptions, emotions, behaviour and relationships with others. Mental disorders include: depression, bipolar disorder, schizophrenia and other psychoses, dementia, and developmental disorders including autism (7).
- **Years lived with disability (YLD):** the number of incident cases in a specific period is multiplied by the average duration of the disease and a weight factor that reflects the severity of the disease on a scale from 0 (perfect health) to 1 (dead) (8).
- **Treatment gap:** the value difference between the total number of people with a medical condition in need of treatment and those who do not get treatment (9).
- **Gender-based violence:** any form of harm inflicted on an individual premised on gender (10).

- **User fees:** the charges a consumer pays as a part of the total cost of provided services (11).
- **Psychotropics:** drugs that influence psychological function (e.g. mood), including anti-depressive agents, anxiolytics and anti-psychotic agents (12).
- **Deinstitutionalization of mental healthcare:** the process of shifting mental healthcare for severe mental disorders from psychiatric, institutional settings to community-based, outpatient settings (13).
- **Integration of mental health services into primary healthcare:** mental health services provision by healthcare workers in primary-care settings. This might include detecting, diagnosing and treating certain mental disorders and issues influencing physical and mental health and well-being (14).
- **Mental Health Gap Action Program (mhGAP):** clinical tool developed by the World Health Organization for purposes of training and capacity building of non-specialized Healthcare workers in low-resource settings in low- and middle-income countries, to scale up mental healthcare. It addresses mental, neurological and substance use disorders, including depression, psychosis and dementia (15).

Introduction

I, the author of this thesis, am Sari Taha. I was born and grew up in Nablus, Palestine. 11 years ago, I decided to study human medicine at An-Najah National University, not entirely aware of the exact path ahead. Upon graduation, I worked as a medical doctor at the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) for almost three years. This is where I started to accumulate interest in public health, global health and mental health. Soon, I was accepted to study a master's degree in international health at the Royal Tropical Institute (KIT) in Amsterdam, for which I have written this thesis.

The Global Burden of Disease Study 2019 drew attention to the increased burden of mental disorders in our current time. The study showed that cases of mental disorders increased by 48.1% from 1990 to 2019. Around 14.6% of global Year lived with disability (YLDs) were caused by mental disorders in 2019 (16). This coincided with the COVID-19 pandemic, which had a negative influence on mental health globally (17,18). Mental health is even worse in conflicts, which mostly occur in low- and middle-income country where a huge treatment gap already exists. In conflict-affected areas, it is estimated that one in five people live with mental disorders as compared to one in 14 globally (19). Despite the high need for treatment, access to treatment services is limited. A household survey in Iraq revealed that only 10.8% of the respondents who have sign and/or symptoms of mood, anxiety, behavioral or substance-use disorders had actually sought care for their disorders (20).

My motivation for conducting a review in mental health comes from several inspirations. Humans yearn for happiness and satisfaction—or rather, the attainment of pleasure and the avoidance of pain in the utilitarian terms of Jeremy Bentham. The field of mental health is the answer to these aspirations. Undeniably, mental health affects physical health, day-to-day life and academic and professional productivity. I view mental health as an ease-to-disease spectrum in which nobody is sheltered from the staggering nature of mental health issues—It is everybody's concern.

Palestine has been in constant conflict for over a century, adding to an ancient history of wars and tragedies. My interest in mental health met with the context of conflict that I lived in, and it culminated with the urgency of mental ill-being of our time, all made me motivated to write this thesis.

Background

The Eastern Mediterranean Region Office (EMRO) of the World Health Organization (WHO) serves 21 member-states in addition to the Occupied Palestinian Territories (oPT).¹ Nearly 745 million people live in the Eastern Mediterranean Region (EMR), covering an area that extends from North Africa, to Middle East to Central Asia (21). See the map of EMR in figure (1).

Arabic is the spoken language in 17 areas, Somali in Somalia and Djibouti, Persian in Iran, and Dari and Pashto in Afghanistan, while Pakistanis speak six major languages (22). Islam is the dominant religion in the region, with a significant minority of Christians living mostly in Egypt and the Levant, in addition to many religious minorities. The majority of the population is younger than 25, whom are projected to exceed 217 million by 2050 (23). While 70-90% of the populations in most countries live in urban areas, the majority of the population in Afghanistan, Sudan, Egypt, Pakistan, Somalia and Yemen live in rural areas (24).

Although the region is home to diversified cultures that cannot be summarized in one description, key cultural commonalities exist. The Arab states, which comprise the bulk of the region, have a common historical and political context, and share similar literature, art and music (25–27). People in the EMR are generally conservative, and traditional institutions, such as family, friends and religion, continue to shape the lives of Arab youth (28). Moreover, the societies are patriarchal and largely influenced by gender roles, restricting women's control over and access to resources (29–31). However, there has been a recent improvement in gender equality in the region. Early marriage has declined, the legal status of women has been enhanced, and the educational gender gap has improved in most areas (29,32,33). As the rate of female labour participation is 26%, as compared to the global rate of 51%, the improvement in education in Arab states is not matched by a similar trend in female labor participation (34). Furthermore, literacy rates have dramatically increased across almost all countries in the region, but women still have slightly lower rates than men in most states (35).

¹ The Occupied Palestinian Territories (oPT) will be referred to as Palestine throughout this thesis.

The Eastern Mediterranean Region (EMR)



Figure (1): Map of the Eastern Mediterranean Region (EMR)

Source: The Institute for Health Metrics and Evaluation (IHME), 2016.

During the past two decades, the region has been characterized by armed conflicts, political unrest and forced displacement. Twelve out of the 22 states had at least a degree of conflict at some point during the last 20 years. Consequently, more than half of the World's refugees have originated from the EMR. Conflict in Syria has caused the worst refugee crisis globally, and Yemen is home to the worst humanitarian crisis, with almost 80% of the population in need for humanitarian assistance (36).

Conflict-affected areas have poor economic, political and health-related indicators. The life expectancy at birth ranges from 56.4 in Somalia to 75.7 years in Libya (37). In these states, the healthy life expectancy at birth is below the global average of 63.7 years except for Syria and Libya (38). All countries have a gross domestic product (GDP) per capita rate lower than the low- and middle-income countries (LMIC) average of 5,530 US dollar (39). Likewise, Unemployment rates are higher than the LMICs average of 6.3%, ranging from 24.9% in Palestine to 10.6% in Syria in 2021 (40). Nearly 82.3%, 55% and 49% of the population live under the national poverty line in South Sudan, Afghanistan and Yemen, respectively (4). Figures (2) and (3) depict life expectancy and poverty rates in these areas.

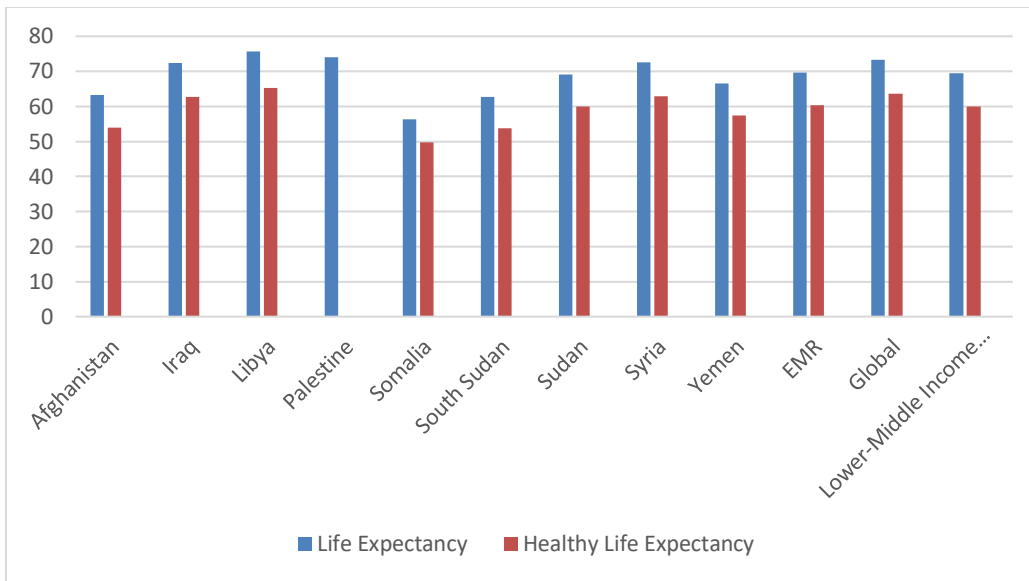


Figure (2) Life expectancy and healthy life expectancy of conflict-affected areas in EMR in comparison to global and low- and middle-income countries rates. (Source: WHO The Global Health Observatory (37,38))

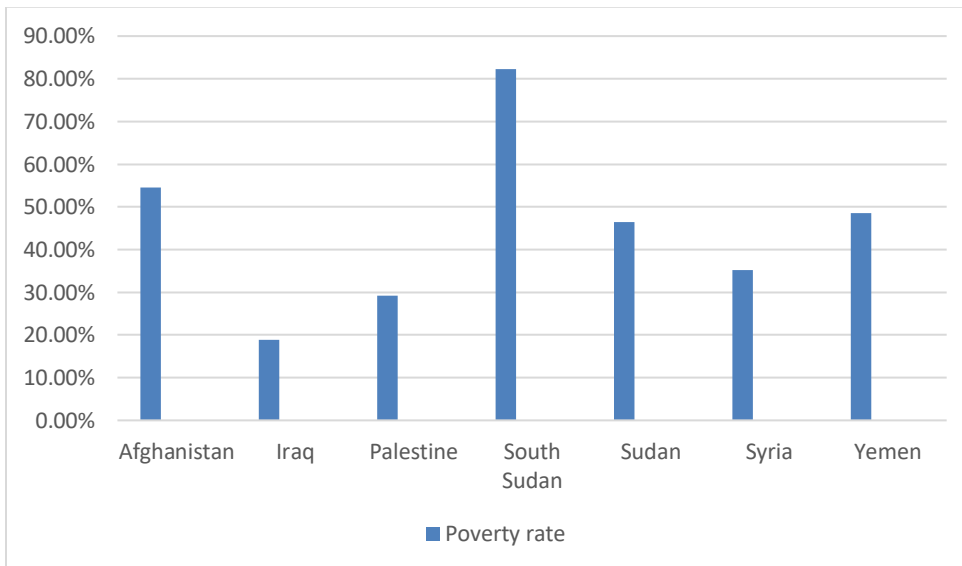


Figure (3) Poverty rate of conflict-affected areas in EMR. (Source: World Bank)

Conflicts have had an adverse impact on health in the region. Health can be affected directly by war-inflicted trauma and mental disorders, or indirectly through the change in political, economic and environmental conditions (the collapse of healthcare systems, poor access to resources, and geographical and financial restrictions), resulting in worsening morbidity and mortality from non-communicable diseases, infectious diseases and maternal complications. Women are particularly affected by war-induced gendered

effects, including increased sexual violence, unwanted pregnancy and poor sexual and reproductive health. By 2017, Somalia and Afghanistan were among the five countries with the worst maternal mortality rate in the world, with 829 and 638 per 100,000 live births, respectively (41). Yemen witnessed the worst cholera outbreak in recorded history, with almost 1.4 million cases by May, 2020 (42,43). In 2013, an outbreak of 22 cases of polio was announced in Syria, while the disease remains endemic in Afghanistan and Pakistan (44,45). Yemen and Somalia score alarmingly high rates of stunted children under 5, with almost 47% and 42%, respectively. Afghanistan and Sudan follow with a rate of 36.6% (24). Most of these countries, however, have excellent rates of access to improved drinking water and sanitation facilities (over 95%), except for Yemen, Afghanistan and Somalia (less than 70% for both) (24).

Healthcare systems in conflict-affected areas of EMR are characterized by weak governance, low spending on health and ineffective health information systems (46). The mean general government health expenditure (GGHE) as percentage of general government expenditure (GGE) ranges from 4.29% in Yemen to 9.88% in Sudan, fluctuating around the regional average of 7.9% (47). Of this, Iraq and Syria spend only 2% out of GGHE on mental health, while data is unavailable for other states (48,49). All states are trailing far behind the commitment of universal health coverage (UHC) to leave no one behind. For instance, Iraq, Afghanistan and Sudan have the highest out-of-pocket expenditure (OOP) regionally and globally, with 78.5%, 75.5% and 73.9%, respectively, pushing almost 10%, 6% and 2% of the population into poverty as a result of these expenses (24). Moreover, there is a profound lack of human resources for health. The vast majority of these states have a lower rate of physicians as compared to the regional and global rates of 11.1 and 16.3 per 10,000 population, respectively (50).

Problem Statement and Justification

Mental disorders are defined WHO as “a combination of abnormal thoughts, perceptions, emotions, behaviour and relationships with others” (7). Mental disorders contribute to a significant morbidity and mortality, causing personal distress and disability, and complicating other physical illnesses. Moreover, they have a substantial social and economic impact on the individual and society as they reduce productivity and worsen social function (15,51). As of 2019, almost 971 million people were affected with mental disorders globally, amounting to 19% of the total global years lived with disability (YLDs) (16). Worse still, the burden is underestimated by more than a third (52).

Despite this high burden, health systems worldwide fail to meet the needs of their people, especially in LMICs, where 85% of people with mental disorders reside (53,54). It is estimated that between 76% and 85% of people with severe mental disorder in LMICs do not seek medical help (53).

Armed conflicts, which most frequently take place in LMICs, cause even a higher burden of mental disorders. The sudden increase in health demands is combined with the compromised capability of healthcare systems to deliver services to respond to the need of their people, leaving the populations susceptible to increased morbidity and mortality (55). The transition of healthcare systems from acute response to recovery phase is challenged by lack of funding and planning and humanitarian-development incoordination (56,57). In such contexts, fragile healthcare systems that essentially had poor performance and little focus on mental health even prior to the eruption of conflict worsen people’s access to care (58,59). Research from warfare settings has revealed that exposure to conflict-related traumatic events precipitates psychosocial distress, hopelessness, depression, anxiety and post-traumatic stress disorder among civilians (19,60,61). According to a systematic review conducted by WHO in 2017, one in five people residing in conflict-affected areas live with mental disorders in comparison to one in 14 people globally. When adjusted for comorbidities in conflict-affected populations, 10.8%, 15.3% and 21.7% have depression, anxiety and post-traumatic stress disorder (PTSD), respectively. These three disorders remain the major focus of mental health research in conflict-affected areas as only two studies have examined psychosis while none has looked into bipolar disorders (19).

Measures of quality of life in conflict-affected areas show a marked difference in comparison to global measures. For depression, there is an estimated 24.8 YLDs per 1000 persons in conflict affected area, almost five times the global rate. Similarly, 23.2 YLD per 1000 persons are estimated to result from anxiety disorders in conflict-affected populations as compared to 3.5 YLDs per 1000 persons globally in 2016 (19).

The need for mental health care in conflict-affected areas in EMR is high. The prevalence of PTSD comorbid with depression was found to be 18.7% and 8.1% in Palestine and

southern Darfur, respectively (62,63). The lifetime prevalence of major depressive disorders was reported to be 24.3% in the Palestinian West Bank (64). Charlson et al. used predictive models to estimate the prevalence of mental disorders and service coverage targets in Libya. The models predicted that the prevalence of severe depression and PTSD was 19.8% and 12.4%, respectively, and that the available resources fall far below the service coverage targets (65).

Of note, women are a particularly vulnerable group among conflict-affected populations. In Afghanistan, one study revealed significantly more depression, anxiety and PTSD among women with an odds ratio of 7.3, 12.8 and 5.8, respectively, as compared to men (66). In Palestine, 69% of the women in one study reported social, psychological and economic pressure. Moreover, the prevalence of depression and anxiety increases in older conflict-affected populations globally, but PTSD demonstrates an inverse trend (19). The trend is especially true in Palestine where 23-70% of the children and adolescents were estimated to have PTSD (67).

Against this background of a huge burden of mental disorders, access to healthcare services is limited, which causes a huge treatment gap. In Iraq, only 10.8% of those who have symptoms diagnostic of mood, anxiety, behavioral or substance-use disorders received treatment (20). In community-health centers in West Bank, only 108.6 new service users per 100,000 population were provided mental healthcare in 2019, which is far below global rates (24). For comparison, the incidence rate of mental disorders among Europeans was 950 cases per 100,000 population in 2019 (70).

Limited research has explored the factors that influence access to mental healthcare treatment services among adults in conflict-affected areas, that is, within the borders of areas which have been exposed to conflicts, excluding refugees outside their countries of origin as they are mostly affected by different sociocultural, financial and health system-related conditions. To date, no global, regional or comparative study has been carried out to review the available literature on factors influencing access to mental health services in general nor in relation to a specific mental disorder in conflict-affected settings.

Without reviewing the overall picture of what might influence access to mental healthcare, the treatment gap would remain unchanged. Worse yet, low access to mental healthcare may extend across time as intergenerational trauma (71). Identifying the facilitators and barriers that are most salient to conflict-settings is key to deliver accessible, universal and quality care, especially since the burden of mental disorders is high. Interventions and research tend to propose arbitrary and temporary solutions instead of more focused, cost-effective possibilities. Furthermore, improving access to mental healthcare in conflict areas is a step towards achieving the third target of the Sustainable Development Goals (SDGs) and the WHO's Comprehensive Mental Health Action Plan 2013–2030, where mental health was directly addressed (72,73).

This study aims to explore scientific and grey literature for studies and reports investigating the factors that influence access to mental treatment services from the provider's and user's perspectives among adult populations in conflict-affected regions. Due to feasibility and validity concerns, this review is limited to EMR.

Objectives:

General objective: To explore the literature for potential factors influencing access to mental healthcare treatment services among adult population in conflict-affected areas in EMR from the provider's and user's perspectives.

Specific objectives:

1. To explore the demographic, sociocultural, financial and logistic factors influencing access to mental healthcare treatment services among adults in conflict-affected areas in EMR.
2. To explore the knowledge and attitude towards mental health and mental healthcare among adults in conflict-affected areas in EMR.
3. To explore healthcare system-related factors influencing access to mental healthcare treatment services in conflict-affected areas in EMR.
4. To provide conclusions to guide future research into investigating the potential factors influencing access to mental healthcare.
5. To provide recommendations for governmental and humanitarians stakeholders on improving access to mental health services in conflict-affected settings.

Methods

This review addresses mental healthcare in general, rather than focusing on a particular mental disorder, for multiple reasons. First, it is underpinned by the mental illness spectrum approach in which mental illness is viewed as spanning multiple diagnoses, alternative to the rigid medical lexicon of diagnostic manuals, such as Diagnostic and Statistical Manual of Mental Disorders (DSM), which often fail to assign atypical presentations to established criteria (74,75). Especially in primary-care settings, patients complain of distress and dysfunction that are inclusive of more than one disorder, or alternatively may fall short of satisfying one criterion (76). In the same vein, some studies have suggested that depression and anxiety in particular have overlapping symptomatology, and such codification might thus be inadequate (77). Particularly in the context of conflict, similar approaches have been proposed in local conflict research, such as the ‘ease to disease’ spectrum where social wellbeing is incorporated into assessment (78,79). That is not to say that the criteria-based approach is ineffective, but it is rather insufficient, especially in conflict-affected settings. Next, trends of access to mental health services seem to be universally low across populations with different mental complaints despite the high needs, which suggests that common factors may affect access to mental healthcare as a whole. It is important to note that mental health research in conflict regions have had an almost exclusive interest in distress, depression, anxiety and trauma-induced illnesses (19).

Search Strategy

A search of the literature was performed and updated between March and June, 2022. As this paper is a literature review, academic databases and search engines were the main methods of data collection. Grey literature was explored by using Google search tool to search for reports published by national institutions, non-governmental organizations (NGOs) and international agencies; and by searching the official websites of these organizations. The advanced search tools of PubMed, VU library, Google Scholar, and APA PsycInfo were mainly used to search for titles, keywords, abstract and MeSH terms of potential eligible studies. Search terms combined country-related terms, mental disorders terms and/or specific words (access/utilization). Additional articles were explored by snowballing from existing articles. Table (1) provides details on the search terms and tools that were used.

Table (1): The search tools and terms

	Search tools and terms	Examples
Using abstract +/- Medical Subject Headings (MeSH) as search tools	<p>Abstract:</p> <p>1- country/areas</p> <p>2- disease (depression – PTSD – trauma – anxiety – neurosis – psychological – psychiatric)</p> <p>3-Access phrase (Access – services – utilization)</p> <p>(Changing each entity at a time)</p> <p>MeSH heading: - disease</p>	<p>- ab:(access) AND ab:(depression) AND ab:(iraq)</p> <p>- ab:(access) AND ab:(mental) AND ab:(palestine)</p> <p>- ab:(utilization) AND ab:(depression) AND ab:(libya)</p> <p>- ab:(access) AND hm:(depression)</p> <p>- General (used at the begging): ab:(utilization) AND ab:(depression) OR ab:(PTSD) OR (mental) AND ab:(libya)</p>
Using title +/- MeSH as search tools	<p>Title</p> <p>- country/areas - disease -Access phrase</p> <p>(Changing each entity at a time)</p> <p>MeSH heading: - disease</p>	<p>ti:(Access) AND ab:(depression) AND ab:(iraq)</p> <p>- ti:(access) AND ab:(mental) AND ab:(palestine)</p> <p>- ti:(utilization) AND ab:(depression) AND ab:(libya)</p> <p>- ti:(access) AND hm:(PTSD)</p> <p>- ti:(services) AND hm:(anxiety)</p>

<p>Using “factor” as a search term</p>	<p>Abstract:</p> <ul style="list-style-type: none"> - Factor (expected barriers/facilitators: stigma – faith healer – beliefs – gender – age – employment...) - country/areas - disease (Changing each entity at a time) <p>Mesh heading:</p> <ul style="list-style-type: none"> - disease 	<ul style="list-style-type: none"> - ab:(stigma) AND ab:(depression) AND ab:(iraq) - ab:(stigma) AND ab:(mental) AND ab:(Syria) OR ab:(Syrian) - ab:(stigma) AND hm:(depression)
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- This table is based on search using Vrije Universiteit Amsterdam (VU) library
- This is not comprehensive of all tools and terms used, but serves to explain the search strategy.

Inclusion and Exclusion Criteria

To identify countries affected by conflict, the review refers to the World Bank’s list of Fragile and Conflict-affected Situations. This list classifies ongoing conflicts according to conflict intensity and government fragility as per the number of conflict deaths (80). Prior to 2020, one list included states with fragility without indicating whether these states were in armed conflict or not. The states that were listed before 2020 but not thereafter were Palestine, Lebanon and Djibouti. To solve this, states with more than 1 causality per 100,000 population and above 250 absolute number of casualties on 5 or more years since 2000 were included in this review to capture the conflicts with considerable scale in effect and duration (81). Based on this, Palestine was included while Lebanon and Djibouti were excluded. Lebanon and Djibouti were most likely listed due to non-conflict fragile situations as the major wars (the 2006 Lebanon War and the Djiboutian–Eritrean border conflict) lasted less than 5 weeks (82,83). Moreover, South Sudan is now an independent state that is part of the WHO’s Regional Office for Africa, but it was geographically in the EMR during part of the period included in this review. In conclusion, nine areas were included: Afghanistan; Iraq; Syria; Palestine; Yemen; Libya; Sudan; South Sudan and Somalia.

Years and language filtering tools were applied to exclude articles which were published before 2000 and whose language is not English nor Arabic (the native language of the author). Literature with the following characteristics was excluded: those with a narrow focus on a non-common particular psychiatric disorder; exclusively exploring access to

primary prevention or follow-up services; or focusing on children and adolescents. Inclusion and exclusion criteria are summarized in table (2).

Table (2): Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Population: adult	Population: Children and adolescents
<p>Conflict-classification: High – medium – low with fragility (As per the World Bank’s list of Fragile and Conflict-affected Situations); *States on the Harmonized List of Fragile Situations (prior to 2020):</p> <ol style="list-style-type: none"> 1. Above 1 causality per 100,000 population <i>and</i> 2. Above 250 absolute number of casualties on 5 or more years since 2000. 	<p>Conflict-classification: States on the Harmonized List of Fragile Situations (prior to 2020):</p> <ol style="list-style-type: none"> 1. below 1 causality per 100,000 population <i>or</i> 2. below 250 absolute number of casualties on 5 or more years since 2000.
Language: English and Arabic	Languages other than English and Arabic
Type of services: treatment services	Type of services: Primary and tertiary prevention, and follow up services.
Location: Afghanistan; Iraq; Syria; Palestine; Yemen; Libya; Sudan (only South Sudan/Darfur); Somalia	Date of publication: before 2000
	Exclusive focus on one non-common psychiatric disorder (e.g. schizophrenia and post-partum depression)

The Conceptual Framework

Several frameworks have been proposed to categorize access to and utilization of healthcare services. Penchansky’s and Thomas’s six A’s (1981), Andersen’s Behavioral Model (1995) and Levesque’s framework (2013) are widely used to conceptually analyze access to healthcare (1,84,85). This review utilized Andersen’s framework (Andersen’s behavioral model) of access to healthcare services. This framework has been modified four times since its creation, where evolving models acknowledge the merits and drawbacks of previous ones, and builds upon them. In 1995, the fourth phase of Andersen’s framework was published. This phase ascribes access to healthcare to factors that pertain to both the provider and user, and recognize the roles of personal needs, health-system factors and environmental factors, which are relevant to access to mental-health services. Moreover, environmental factors, such as traumatic events and danger are related to conflict settings (85).

Andersen’s framework was modified to suite mental healthcare, and to account for the degree of ambiguity in the framework. First, stigma is discussed under health beliefs, although it is affected by other social factors. Organization of healthcare services is

further subdivided into: integration of mental health into primary healthcare (PHC); competency, supervision and training of healthcare workers (HCWs); cultural competence of HCWs; and language barriers. Availability of health facilities is discussed under health-system resources rather than as enabling resources. Figure (4) depicts the modified framework in details.

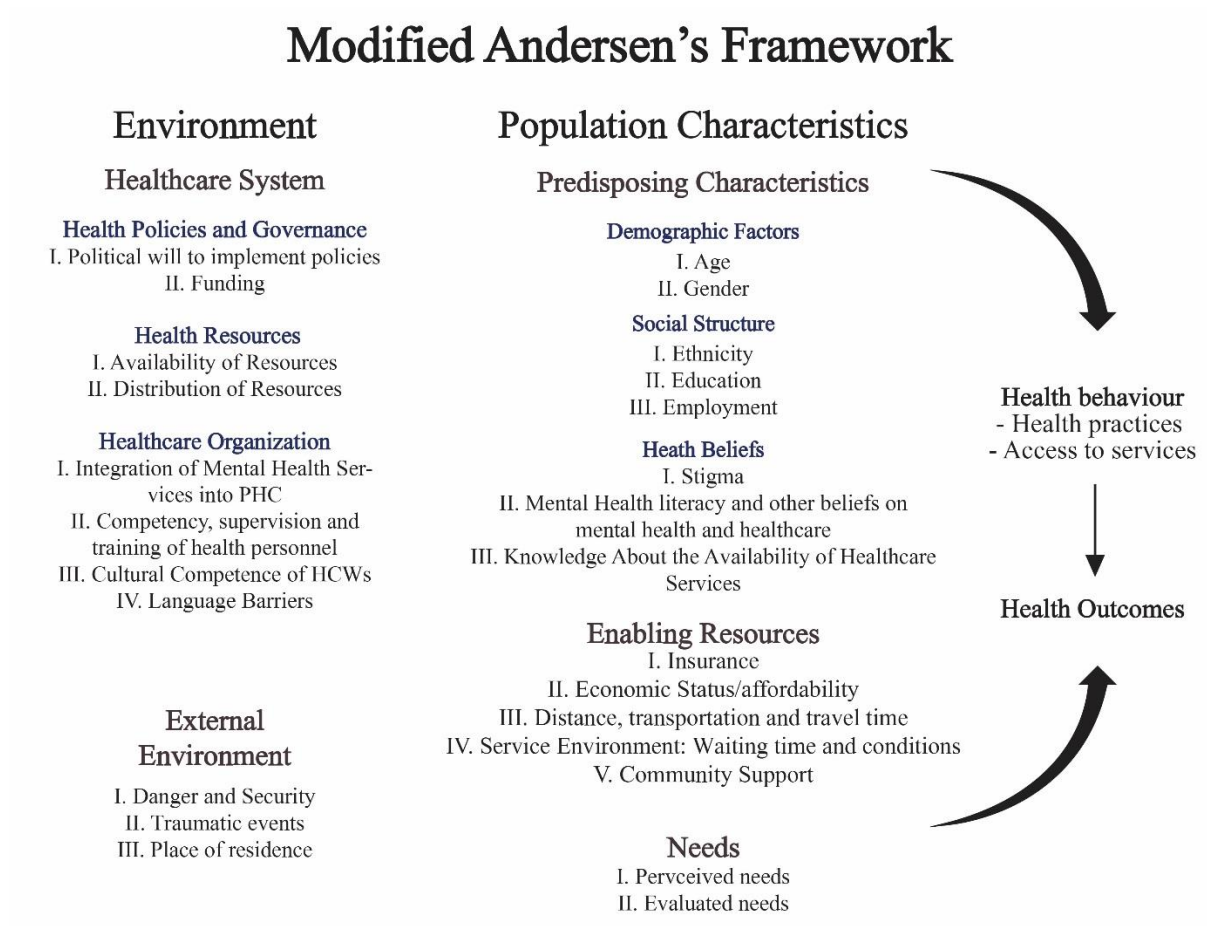


Figure (4): Modified Andersen's framework. Designed by the author.

Results

Studies Characteristics

In this review, 54 sources were cited. Of these, 24 are academic studies (n=19) or reports by organizations based on scientific methods (n=5); 16 are forms of expert opinion reports, which are mostly country profiles, and contain referenced literature to build up arguments; six other miscellaneous reports with weak or unclear evidence bases; two magazine articles; three press releases by NGOs; two literature reviews; one news piece; one thesis; and one training curriculum. Quantitative methods were used in ten scientific studies/reports, while qualitative and mixed-methods were used in five and six studies/reports, respectively. Only one case-study design was reported. The majority of sources (70.4%) were published in the 2010's, while only four sources were published in the 2000's. The sample size of quantitative studies widely ranged from 52 to 4445 participants. With 11 sources, Iraq is the area with highest number of cited sources, followed by Palestine with eight sources. Table (3) and (4) contain details on the included scientific studies/reports.

Table (3): Academic studies included

First Author	Location	Study Design	Sample Size and characteristics	Year
Kovess-Masfety, V.	Afghanistan	Quantitative	4445 users	2021
Ventevogel, P.	Afghanistan	Case study	N/A	2012
Nguyen, A.	Iraq	Mixed methods	123 users; 40 providers; 12 directors	2019
Sadik, S.	Iraq	Quantitative	500 users	2010
Ayazi, T.	South Sudan	Quantitative	1200 users	2013
De Graaff, A.	South Sudan	Mixed methods	18 in semi-structured interviews; 10 in focused group discussions; 475 in Questionnaire	2015
Marie, M.	Palestine	Qualitative	15 providers (nurses)	2017
Afana, A.	Palestine	Quantitative	161 providers	2000
Younis, M.	Iraq	Quantitative	482 users	2019
Jefee-Bahloul H.	Syria	Quantitative	52 providers	2016
Jefee-Bahloul H.	Syria	Quantitative	354 users	2014
Ben-Zeev D.	Palestine	Quantitative	272 users	2017
El Hayek, S.	The Arab World (Syria – Sudan – Libya)	Qualitative	N/A	2020

Sanhori, Z.	Sudan	Quantitative	1549 users	2019
Ali, S.	Sudan	Mixed methods	103 users (carers); 6 providers (psychiatrists)	2016
Osman, A.	Sudan	Mixed methods	81 providers (psychiatrists)	2020
Bashir, M.	Sudan	Quantitative	644 users (medical students)	2020
Marie, M.	Palestine	Literature review	N/A	2016
Marie, M.	Palestine	Literature review	N/A	2020

(N/A: no information available/not applicable)

Table (4): Reports based on scientific methods published by international organizations and NGOs.

Author	Location	Study Design	Sample Size and characteristics	Year
International Medical Corps	Yemen	Mixed methods	Desk review; interviews; focused group discussion with 160 users, and 15 providers and key informants	2019
WHO	Somalia	Mixed methods	N/A	2010
Human Rights Watch	Several locations	Qualitative	N/A	2020
MedAct (Sharma, S.)	Iraq	Qualitative	Interviews with key informants; Desk review; Literature review	2012
International Medical Corps	South Sudan	Qualitative	Desk review; interviews; focused group discussion with key informants	2015

(N/A: no information available/not applicable).

The Findings of the Studies

Predisposing Characteristics

1. Demographic Factors

I. Age

In one study in Afghanistan, middle-age (35-49 years) and those 50 year or older had higher odds of utilizing mental health care services, but only “middle age” was consistently significant in univariate and multivariate analyses (86).

II. Gender

The consensus among users, providers and directors in a mixed-methods study conducted in PHC centers in Northern Iraq was that women are negatively influenced by decision-making to seek mental-health services (87). This is despite the improved autonomy of women in political spheres in general against a background of traditional conservatism in Northern Iraq (88). The same study reported a lack of matched gender as a barrier to access (87). On the other hand, a study in Afghanistan revealed that gender was not significantly associated with mental-health service utilization (86).

As part of a wider cultural revolution, women in the “Middle East”, are becoming more empowered to seek psychiatric help, according to a report that attributed this to improved access to education and employment, and the impact of social media on changing youth culture in the region (89,90) . However, an old report published in the 2000’s by the WHO argued that men’s attitudes had not adapted to this change (91). Physical abuse, for instance, is still underreported out of fear of shaming the family by the society at large, or exacerbating physical abuse in retaliation for the mere act of reporting (89). In Afghanistan, a community-based intervention in Mohmandara village reflects high exposure to gender-based violence (GBV), as most women living in the village participated in support groups. Because reporting violence was not a safe option, one solution to help women was income generation activities, based on the assumption the economic empowerment of women would mitigate GBV (92).

Gender values often affect help-seeking behaviour, forcing women into reporting somatic symptoms instead of GBV. The physical abuse translates into a wide array of mental complaints, such as depression (89). The high depression rate among women in United Arab Emirates, a country with similar cultural characteristics to other countries in the region, was significantly associated with social factors, such as the number of children (93). This is met with the absence of gender-sensitive provision of mental healthcare

services at clinical- and policy-level (89). This report, however, is not packed by strong evidence-based research, and are restricted to the geographically-vague “Middle East” concept and not the EMR.

Toxic masculinity, which delegitimizes feelings of weakness and fear for males, constitutes another barrier to accessing mental-health services. In Palestine, males consider seeking mental health services as a sign of weakness, as discussed by Marie et al. (94). In a survey conducted in Iraq, almost 60% of participants thought that personal weakness can be the cause of mental illness, upon which seeking mental healthcare is considered a proof of weakness (95).

2. Social Structure (ethnicity, education and employment)

In Afghanistan, Pashtun ethnicity was found to be associated with higher rate of access to mental health care services when compared to Tajik ethnicity (86). The same study in Afghanistan found that education had a significant association with service utilization in univariate analysis, but this association was nullified in multivariate analysis because higher level of education was associated with the Pashtun ethnicity (86). No study has yet explored the relation between employment/occupation and access to mental healthcare.

3. Health Beliefs

I. Stigma

Stigma is a socially-constructed label that constitute a set of beliefs and stereotypes assigned to a particular disorder. Public stigma can result from lack of knowledge, negative attitude (prejudice) and/or discriminatory behaviour (96). Implicitly, social norms and institutional policies give rise to structural stigma whereby people with mental conditions have unequal access to employment, healthcare and living conditions (97). Worse yet, repeated exposure to stigma causes self-stigma, in which people with mental illness harbor negative feelings towards themselves (98).

Stigma seems widespread in conflict-affected areas of EMR. Stigma is frequently cited as a barrier to accessing treatment in most academic articles and reports on access to mental healthcare, even before conflicts erupted. In Afghanistan, mental health is a “taboo” topic, pushing people to avoid seeking care (99). In Somalia, people dichotomize mental health status into sane and insane (100). In Iraq, stigma ranked first among the barriers to accessing mental-health services, as mentioned by 74 out of 140 distinct stakeholders in a mixed-method study. To make the questions culturally-specific, the interview guide was formulated using multiple frameworks, evaluated by experts, and tailored to different stakeholders (87). One exception is recent report that was built on interviews with health

workers in Iraq, which revealed that stigma had declined due to “awareness programs” (101).

Earlier in 2010 in Iraq, another study investigated the public perception of mental health and reported that 83% of the participants thought that people with mental illness are to blame for their own condition, and over a half said that they are afraid to talk or work with someone with a mental illness (95). In South Sudan, a similar study also demonstrated comparable results using a cross-sectional survey. Almost 42% and 46% of the participants said they were afraid to have a conversation or work with someone with mental illness, respectively. The study also utilized a social distance score, which is a tool to measure personal readiness to engage in relationships at different extents of intimacy. The results showed that low level of education was associated with higher social distance score, that is, more a stigmatizing attitude (102). In Sudan, only 8% of participants in one study had no stigmatizing attitudes towards people with mental illness. Age group (30-39), employment and education were significantly associated with less stigma, while income was significantly associated with more stigma. The study used robust statistics tests, such as McNemar’s test, to confirm the results (103). Another study conducted among medical students in Sudan revealed that stigma is ranked first as a barrier to access mental-health services (63%). Likewise, only 36% of participants in another study in Sudan reported that they did not care about others when seeking care (104).

Stigma-by-association, whereby relatives of people with mental illness are stigmatized (105), was repeatedly cited as a barrier to mental healthcare. Another mixed-method study in South Sudan reported that relatives of patients with mental illness may face derogatory remarks and difficulties in getting married, which explain the family’s objection to seeking care (106). Similarly, in Palestine, nurses working in community centers reported difficulties convincing patients’ families to participate in mental health programs, fearing that they might face discrimination (107). In Libya, patients’ families consult a psychiatrist as a last option after spiritual healers and general practitioners, because the last two options cause less stigma-by-association (108).

Using offensive wording to describe people with mental illness is also common. The previously-mentioned qualitative study in Iraq reported that “crazy” is frequently used to describe people with mental illness (87). In Yemen, words such as “not-normal,” “not stable,” and “crazy” are commonly used (109).

Furthermore, stigma that arises from or is directed towards HCWs is an additional barrier to the provision of quality care. In Palestine, many nurses refused to apply for jobs in mental healthcare in fear of being stigmatized (110,111). Additionally, nurses working in mental healthcare complained about receiving critical remarks from colleagues working in other departments (107).

Amid this background of ingrained stigma in the society, official institutions and media still perpetuate the societal stigma through systematic discrimination embedded in laws, and through abdicating the duty to dispel public misconceptions. Using stigmatizing terminology, such as “mad” and “crazy”, is still entrenched in official laws and commonly used in legal suits in Syria. Moreover, because the collaboration between the film industry and scientific community is lacking, misrepresentation of psychiatric disorders in films further compounds the societal views thereof (112). This also holds true in Palestine where there is noticeable lack of awareness programs about mental health, including in media and films, as discussed by Marie et al. (113).

II. Mental Health Literacy and Other Beliefs on Mental Health and Healthcare

Aside from stigma, supranatural beliefs about mental health and healthcare constitute a barrier to access. In Yemen, South Sudan, Somalia and Libya, people still attribute mental health issues to possession by ‘jin’, which is the Arabic translation of “the Devil” commonly used in texts of Abrahamic religions. People with mental illness are often described as “*possessed by demon or jinn,*” or “*far from God.*” Because people perceive the cause to be as such, they follow informal health-seeking behaviour, such as spiritual healers, traditional healers or witch doctors, who are typically considered the solution to “devilish possession” in place of formal medicine (100,102,106,109,112,114). The extent to which these beliefs is common across the region is unknown because most of these findings are based on expert-opinion reports.

Supranatural beliefs are reported in several studies across the region. In a cross-sectional community survey conducted in South Sudan, the majority of the participants attributed mental illness to possession by evil spirits, which was significantly associated with low level of education, living in rural areas and self-employment (102). Another mixed-methods study revealed similar beliefs, although some held contradicting views on informal treatment. One nurse, for example, thought that traditional healer should be consulted because the reason could be witchcraft, but she also stressed the importance of seeking formal care simultaneously. The same study reported that ideal attitude towards mental healthcare contradicted with real health-seeking behaviour. While only 14% of the participants (users and providers) thought that informal healthcare is more appropriate, a plenty of those respondents said that they actually sought informal care for mental-health issues. This study used triangulation of quantitative and qualitative methods to improve the quality of data (106). In Somalia, the cause of mental illness is frequently attributed to spiritual causes. Consequently, people seek care from spiritual or traditional healers, or turn to substance abuse (100,114,115). In Iraq, a recent study revealed that spiritual beliefs are common as 57% of patients sought care from faith healers, and 38.6% of them thought that the care was good or accepted. This might be even underestimated as the study did not reach out to participants who had chosen faith healers as an alternative (116). In Sudan, around 70% of participants in one study said they sought another kind of

treatment, mostly from religious healers, before seeking formal healthcare (104). This is described in a report as an “integral part of everyday life” (117).

Nevertheless, literature shows an alternative perspective on supernatural beliefs (devilish possession and divine punishment). In a survey conducted in Iraq to measure mental health literacy, primarily measuring knowledge about causes of mental illness, most ascribed mental illnesses to scientifically-based reasons such as life events, genetic factors and brain disease, while less than a third of participants thought that God’s punishment can be a cause (95). In another qualitative study in Iraq, little reported traditional healers as a barrier to seeking care, yet many emphasized the role of old traditions in limiting access to mental healthcare (87). Amid the contradicting views and the common reliance on informal care, informants in the abovementioned South Sudanese study alluded to the opportunity that a shift away from traditional beliefs is taking place (106). Based on my own experience in Palestine, traditional beliefs are not commonly employed in justifying the cause of mental illness. On the whole, mental health literacy is improving, but supernatural beliefs seem to coexist.

Social attitude against mental health and healthcare may have been shaped by the inhuman conditions and human rights violations that are perpetuated in mental health facilities. In Yemen, shackling of people with mental illness takes place in the community and within facilities (118). In Libya, patients often receive electroconvulsive therapy without anesthesia, and facilities are insanitary (119).

Worst of all, when inpatient facilities are unavailable nation-wide, inhuman treatment of patients worsens. In South Sudan, people with mental illness were admitted to Juba prison in South Sudan (106,120,121). In Somalia, 90% of people with serious mental illness had been chained once at least, as estimated by the WHO, and most were exposed to malnutrition and poor hygienic conditions (100). Therefore, the WHO partnered with NGOs to inaugurate the Chain-Free Initiative, to reduce inhumane treatment of patients in their homes and communities, and encourage access to formal mental healthcare (122).

III. Knowledge About the Availability of Healthcare Services

Literature analyzed knowledge about the availability of mental health services in three ways. First, the public may be unaware of services despite their availability. In Iraq, 41 out of 140 participants in a qualitative study cited unawareness of services as a barrier. This, however, might have been under- or overestimated because the study had recruited only those who benefited from a PHC-based program, while people who had not had access may be unaware of the program to begin with (87). In another quantitative study in Iraq, almost 70% of the respondents thought that information about mental health services is unavailable in the community (95). In rural areas of South Sudan, people are

frequently unaware of the services provided in cities (106). In a Sudanese study, 46% of the participants did not know where to seek mental-health services (123).

Secondly, people may be aware of the services but perceive it to be of low quality. Only 14% of the participants in the Iraqi study thought that PHC centers provide quality care for mental health (87). In South Sudan, negative ‘word of mouth’ from people who had negative experience with formal healthcare often prompted others to opt for informal care instead (106). An article based on literature review and expert opinions in Syria suggested that distrust in the political regime might have led to distrust in the quality of formal healthcare (124).

Thirdly, People may have misconceptions about mental healthcare practice that have been shaped by the historical reality. Commonly, the public still perceive mental healthcare as hospital-based rather than community-based, and medication-based as opposed to social-based, which might affect perceptions towards mental healthcare in general. In a South Sudanese survey, only about 30% of the participants believed that mental healthcare can be implemented in combined hospital and community approach, and nearly 85% thought that medications are necessary to treat mental illnesses (102). In another study, only two respondents believed that mental healthcare can be adopted in PHC (106). According to unpublished research conducted among community healthcare workers and community members in Iraq, the public considers mental healthcare as medication-based (125).

Enabling Resources

I. Insurance

Understanding the influence of insurance on access to mental healthcare is handicapped by the challenge that different insurance schemes are available in different areas. Little information is available on how insurance coverage effectively influences access to mental healthcare after conflict, especially in countries that have historically provided near-universal health coverage. According to a law issued in 2010, mental health services in Libya are covered by governmental revenues, and not as part of the social health insurance (126). In effect, it is unknown whether this is applied or not, especially since the law was issued before the civil war. In Iraq, patients with mental disorders are exempt from user fees (127). However, the failure to progress towards UHC and the poor quality of care in the public sector in Iraq raised the out-of-pocket expenditure to 78% in 2016, reflecting a limited role of actual insurance coverage (128).

Some conflict-affected areas did not consider psychiatry in insurance coverage before the conflict started, but the conflict amounted to an opportunity to do so. In pre-conflict Syria, neither psychiatric consultation nor psychiatric medications were covered by the national insurance prior to the conflict. As the conflict drew attention to the high

psychological needs of the population, consultation and psychotropics became covered by insurance (112).

II. Economic Status/Affordability

The degree to which UHC is effectively applied determines the amount of OOP, which affects the decision to seek care. Only one study explored economic status effect on access to mental healthcare. Using income level as a proxy, the study revealed that income level is not significantly associated with seeking services in Afghanistan (86). In Sudan, 60% of carers in a qualitative study complained that they faced financial difficulties to access services. Psychiatrists in the same study agreed with the same complaint (104). As specialized services are not available in rural areas in Iraq, people have to pay direct treatment costs, and indirect costs such as transportation and accommodation where these services are available, leaving those who cannot afford it without access to such services (101).

III. Distance, Transportation and Travel Time to the Nearest Facility

Most often, wars decrease the number of facilities through damage to infrastructures and inaccessibility to electricity, and, therefore, leave the population with the encumbrance of travelling to farther facilities to seek care. In some conflict-affected areas, the number of facilities was insufficient even prior to the war (112). Worst of all, there are no available facilities offering mental healthcare in rural areas of South Sudan, and only one hospital offers specialized services to the entire population (121).

Physical accessibility to the facility is determined by the availability of a facility, travel time, transportation cost and means, geographical difficulty and war-afflicted dangers. These factors are largely influenced by the economy, infrastructure and healthcare system before and during the conflict.

In Yemen, around a third of the total population needs more than thirty minutes to reach the nearest PHC facility (129). In a qualitative Sudanese study, only 40% of participants said that they can reach the nearest psychiatric facility in less than an hour by car (104). More than half of the participants in a qualitative study in Iraq cited the distance to the nearest facility and the environmental difficulties to reach it as a barrier to receive mental healthcare in primary settings (87). The specialized services were often not available in rural areas and areas in conflict, pushing people to travel to central areas (101). The situation is even worse in South Sudan where means of transportation to the facility is mostly unavailable, forcing people to travel on foot, which becomes infeasible during rainy seasons (106). Conversely, one study in Afghanistan found no significant association between distance to the nearest facility and access to mental health services (86).

The rise of telemedicine, creates an opportunity to improve access to mental healthcare, especially in conflict-affected areas where physical and human resources are scarce, and the transportation is oftentimes dangerous. A survey was undertaken to assess the attitude of Syrian HCWs towards implementation of a mental telemedicine intervention based on audio/video recording. Half of the providers thought it would be beneficial despite financial, cultural and technical barriers (130). Studies on the user-side give a mixed picture, however. In one study, Syrian refugees did not show approval of telepsychiatry as only 45% of those who reported perceived-need for care accepted telepsychiatry (131). Another survey that was carried out in Palestine to assess adults' attitude towards mobile phone use in mental healthcare showed that 88.2% of the participants thought that it would be helpful for people with mental illness (132). A study conducted to investigate the use of telepsychiatry before and during the COVID-19 pandemic in the Arab World documented this use in three conflict-areas of EMR. During the COVID-19 pandemic, services were provided through messaging and phoneline calls in Libya, in addition to a hotline for psychological support, while they were limited to messaging in Sudan and Syria. This was challenged by unstable electricity, inaccessible internet and inadequate funding (133).

IV. Service Environment: Waiting Time and Facility Conditions

One study aimed to explore the factors that influence access to mental healthcare after implementation of an 8-12-week primary-care based program in Iraq. Although a considerable proportion of the respondents said that PHC centers are crowded with small spaces available, most of those respondents were HCWs, which reflects a provider-perspective. This is confirmed by the quantitative analysis in the same study which showed that "lack of private space" was reported particularly by providers. On the contrary, the majority of the clients described the facilities as large, quiet, clean, which indicates that the service environment may be identified as a facilitator rather than a barrier (87). A report indicated that central psychiatric hospitals and some PHC centers in Iraq, especially in rural areas, are in poor conditions (101). The conflicting views might have arisen from addressing different facilities. The first study was conducted in Northern Iraq, while the report was conducted in Baghdad. Moreover, negative views on facilities conditions were reported by the provider-side in both cases.

V. Community Support

Social support may have a positive impact on mental health outcomes. A study revealed that most Palestinian civilians prefer to talk to a close friend or family member than to seek individual counselling (134). Moreover, support may facilitate or hinder access to formal healthcare services, as demonstrated by a study conducted in Iraq in which the family and community were mentioned both as a barrier and facilitator. As a barrier, the family may directly prohibit the patient from seeking treatment, or indirectly demotivate the patients or refuse to help in household duties. As a facilitator, the family offers

emotional, financial and practical support (87). Similarly, a report from Libya describes family support as taking a pattern whereby it provides emotional support to the patient, but it comes at the cost of delaying access to formal healthcare due to fear of stigma (108).

Furthermore, community involvement can contribute to increased access to mental health services. In Afghanistan, HealthNet TPO, an NGO, designed an intervention to improve access to mental healthcare services in Nangarhar. The intervention trained community health workers (CHWs) to provide psychoeducation, and identify psychological disorders and refer people afterwards. It also created support groups for women and support counselling for individuals. As a result, consultations for mental disorders rose from 659 in 2002 to over 20,000 during the scale-up period (2005-2009). Nevertheless, the intervention is not limited to community-based activity, but it also promotes mental health integration into PHC which contributed more to the increase in service utilization (92).

The Needs

In Sudan, 58% of medical students, who participated in a quantitative study, said they did not perceive the need to seek mental-health services, and 60% preferred to deal with their distress by themselves. The study, however, did not use statistical test to verify these results (123).

External Environmental

I. Danger and security

One study in Afghanistan found that people with mental health needs living in areas with “high” and “very high” danger levels were less likely to access mental health services in comparison to people living in “low” or “medium” level of danger. This association was so strong that it made ethnicity an insignificant association in multi-regression analysis (86). In some governates in Iraq, patients travelling without hospital documents to prove the need for treatment are subject to risk (101).

Additionally, experience from research fieldwork elucidates that security considerations may factor in accessing services. Certain facilities in South Sudan were unreachable for researchers due to security (106). Another study from Iraq described how many clients could not participate due to security reasons (87).

II. Traumatic events

In Afghanistan, exposure to four traumatic events and above was significantly associated with 2.45 higher odds of utilizing mental-health services when compared to no exposure in one study (86)

III. Place of residence

A study in Afghanistan found no association between living in rural or urban region and access to mental healthcare. However, living in different provinces was found to be significant only for the West province which was negatively associated with mental health service utilization, as opposed to Central Kabul province (OR = 0.23) (86). In Iraq, people living in governates with conflict and rural areas have less available mental healthcare services at PHC centers (101).

Healthcare System

1. Health Policies and Governance

I. Weak governance and lack of political will to implement policies

Conflicts present a challenge to health policymaking as multiple agencies, approaches and health systems may coexist, and efforts to restore healthcare in post-conflict state pay less attention to the disrupted policymaking. As shown in table (5), mental health legislations have been enacted in five areas, but the extent to which these are applied is unknown. Four areas have not implemented mental health policy: Somalia, Yemen, Libya and South Sudan (135–137). The Somali fragile state barely provides any mental health service (138). In Somaliland region, a mental health policy was published in 2012, but it was not implemented thereafter (114). In Yemen, attention to mental health is minimal prior to and during the conflict. A mental-health strategy was adopted for the period 2011-2015, but it was not implemented (139).

According to a country-profile paper on Libya, political instability posed a challenge to developing a mental healthcare strategy, especially because research on mental healthcare is lacking (108). However, there is no evidence that the long-term political stability that preceded the conflict was accompanied by political will to improve mental healthcare. On the contrary, a post-graduate training program for psychiatry had not been available until it was proposed in 2013, two years after the start of the First Libyan Civil War (108,140).

Meanwhile, the case of Iraq highlights the importance of political will. In 2004, a mental health act was approved by the Iraqi parliament, but rapid turnover of governments, which essentially did not prioritize mental health, did not implement the act. Later, international funding and expertise increasingly devoted attention to mental health, which coincided with the appointment of a psychiatrist as health minister in 2007 (141). The government adopted a 5-year strategy for mental health in 2008, and started to integrate mental health services into PHC (141). Noticeably, there has been heavy reliance on

international support and expatriate psychiatrists (141–143). However, a recent report highlighted several institutional problems including shortage and incompetency of human resources, unequal distribution of PHC centers, and failure to move away from institutional, biomedical care (101).

Table (5): Availability and year of implementation of mental health policies and legislation

	Policy or Plan	Legislation
Afghanistan	1997	1997
Iraq	2005	2005
Libya	no policy or plan (137)	1975 (108)
Palestine	2004	no legislation
Somalia	no policy or plan	no legislation
South Sudan	no policy or plan	no legislation (136)
Sudan	2008	1998
Syria	2007	1953
Yemen	no policy or plan (137)	Unknown

*Source: WHO. EMRO. Mental health systems in the Eastern Mediterranean Region (2010), unless otherwise indicated.

II. Lack of funding

In 2020, international funding to certain facilities in Yemen was suspended, leading to their closure, and, consequently, influencing access to mental healthcare (109). Likewise, aid in Somalia is vertical and donor-dependent, and it rarely addresses mental health (138). As mental healthcare is reliant on international funding in Afghanistan, its loss lead to shortage in medical supplies, absence of HCWs, and collapse of services delivery (99).

Additionally, lack of funding seems to influence access to mental healthcare in post-conflict settings. In a qualitative study to explore barriers to mental health integration into PHC in Iraq, most providers and directors expressed their concerns that the potential lack of international and governmental support may lead to the dissolution of the program (87). This is part of the overall picture in which development of mental healthcare in Iraq has been largely reliant on aid, which suffered lack of harmonization between stakeholders (141). In a qualitative study in Sudan, almost all user-side participants agreed that the government does not allocate satisfactory funding for mental-health (104).

2. Health Resources

I. Lack of Resources

Conflict-affected areas suffer from a lack of updated official data on the available human resources, while non-governmental reports are either lacking, outdated or provide

inconsistent figures. In Yemen, for example, reports from three sources give three different, yet close, figures on the number of psychiatrists, ranging between 36 and 59 psychiatrists for a 30.8 million population (139,144,145).

According to a report by WHO, the rates of mental-health professionals (Figure 5) range around the LMICs average, but only five conflict-affected areas were reported, which might mask the overall rate in these areas (137,146). On the whole, the rate of psychiatrists varies between conflict-affected areas in EMR, but it is consistently less than 1 psychiatrist per 100,000 population, far below the lowest European rate in Malta, with 3.1 psychiatrist per 100,000 population (147). For instance, the rate is around 0.2 psychiatrist per 100,000 population in both Libya and Yemen (148,149). Worst of all, South Sudan has only two psychiatrists for a 11 million population in 2019, and Somalia has three psychiatrists for a 12 million population in 2010 (100,121).

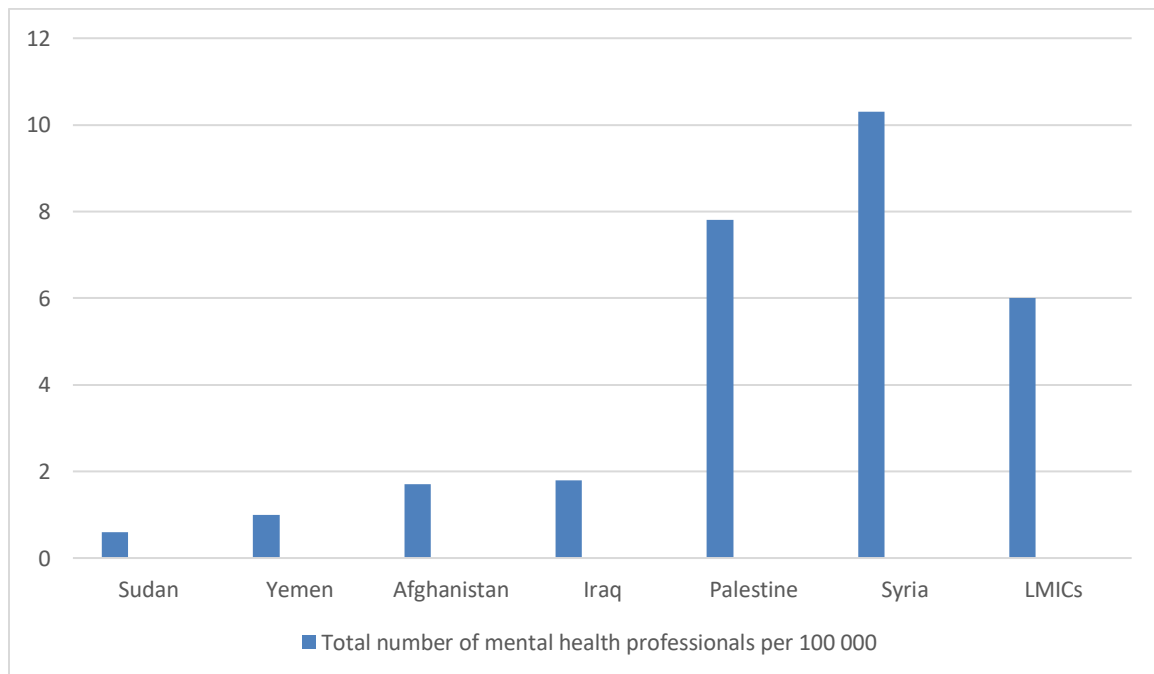


Figure (5): Total number of mental health professional per 100,000 population

Source: WHO. EMRO. Mental health atlas 2017: resources for mental health in the Eastern Mediterranean Region.

The same trend also applies to the rate of psychologists and psychiatric nurses. For instance, Iraq and Syria have the highest rate with 1.2 and 1.1 psychiatric nurse per 100,000 population, which is lower than the rates of most European countries (149).

Table (6) further illustrates the available data on human resources mental healthcare in conflict-affected areas in EMR.

Table (6) Human resources in conflict-affected areas of EMR.

	Psychiatrists [year]	Nurses working in mental health [year]	Psychologists [year]	Social workers [year]
Afghanistan	0.23 [2016]	0.09 [2016]	0.30 [2016]	N/A
Iraq	0.34 [2017]	1.22 [2017]	0.11 [2017]	0.08 [2017]
Libya	0.20 [2007] (148)	0.05 [2007] (148)	5.00 [2007] (148)	1.5 [2007] (148)
Palestine	0.90 [2007] (148) West Bank: 0.60 [2013] (150)	0.58 [2015] (151)	1.00 [2007] (148)	1.1 [2007] (148)
Somalia	0.02 [2010] (100)	0.03 [2007] (148)	0.00 [2007] (148)	0.2 [2007] (148)
South Sudan	0.02 [2016]	0.02 [2016]	0.26 [2016]	N/A
Sudan	0.08 [2019]	0.12 [2009] (152)	0.13 [2016](152)	0.55 [2015]
Syria	0.37 [2016]	1.07 [2016]	1.07 [2016]	0.80 [2016]
Yemen	0.20 [2016]	0.32 [2016]	0.41 [2016]	0.05 [2016]

* The rate is calculated per 100,000 population.

* The source is the WHO's Global Health Observatory unless otherwise indicated.

* When the source provides crude figure for year x, rates are calculated per total population as sourced from the World Bank for year x (153). The population of Palestinian West Bank is sourced from the Palestinian Central Bureau of Statistics (PCBS) as it is not provided separately by the World Bank (154).

* Numbers are rounded off to the nearest 0.01.

* N/A: Non-available

War can trigger migration of HCWs. Physicians for Human Rights documented the details of 56 HCWs who were killed in the first year of Syrian war (155). In Somalia, HCWs were displaced or killed during the conflict, adding to the existing shortage of human resources in mental healthcare (156).

To compensate for the lack of specialized HCWs, post-conflict Iraq took several efforts to encourage training in mental health and integrate mental health into PHC, which raised the number of doctors working in psychiatry from 98 in 2006 to 206 in 2010 (157,158). In Libya, a report of a training-need assessment revealed that the number of psychiatrists was low, and most doctors who had been serving in psychiatric hospitals were not qualified (140). Over a half of Sudanese psychiatrists, who participated in a mixed-methods study, thought that mental-health training of lay counsellors is a solution to the lack of human resources (159).

The number of inpatient facilities in conflict-affected areas in EMR is low, even in comparison to other conflict-affected areas elsewhere. For example, Georgia has 12 inpatient facilities for a population of 3.7 million, while Libya has only two psychiatric hospitals for almost double the population (119,160). Worse yet, South Sudan, Somalia and Syria are extreme cases as far as inpatient facilities are concerned. In Somalia, 5 low-quality psychiatric units are available in the self-declared independent Somaliland, and four others across the country (100,114). In South Sudan, there is no single psychiatric hospital, and only 12 beds are available at the psychiatric department in Juba hospital (161). In Syria, the two public psychiatric hospitals have been partially or totally damaged. Another previous addiction-center was turned to a psychiatric inpatient facility due to increased burden (162,163).

More contentiously, the significance of facility bed rate as an indicator of quality of care continues to generate a considerable debate as some argue that a reduction in this rate reflects a trend towards deinstitutionalization (164). Globally, the US witnessed a reduction in psychiatric beds from 31 to 25 per 100,000 population from 2001 to 2018, with a similar trend in Canada and the UK (165). All conflict-affected area in the EMR have lower rates compared to the EMR average of 6.41 beds per 100,000 population in 2016. Syria, where mental healthcare is mainly institutional, has the highest rate of beds in mental hospitals with 5.34 beds per 100,000 population, while Somalia, Afghanistan and South Sudan have very low rates of beds in general hospitals, with 0.5, 0.3 and 0.1 bed per 100,000 population, respectively (166).

In the meanwhile, the rate of outpatient facilities varies between different areas. Iraq has a high rate of 1.7 facility per 100,000 population, while Palestinian West Bank has a rate of 0.5 facility per 100,000 population (68,166). This is comparable to high-income countries (HICs), such as Greece (1.3) and Portugal (0.7), and upper-middle income countries, such as Argentina (1.7) and Romania (0.9). Nevertheless, comparison can be inaccurate as this rate might include private outpatient clinics, which does not reflect the extent of deinstitutionalization, especially since most conflict areas have barely adopted any measure to move away from institutionalized care, as is the case in Somalia and Yemen (166).

The availability of psychotropic medications seems to be limited. As much as 75% of the health facilities in Yemen reported shortage of essential psychotropics. This is according to an assessment report that triangulated data from mixed-methods using desk review, facility assessment, interviews and focus group discussions (167). Likewise, mental healthcare nurses in Palestine complained that essential medications are frequently unavailable, which mostly concurs with governmental economic hardship (107). Libya and Sudan consistently suffer shortage of medications (168,169). In Iraq, psychotropics are available but authorities impose strict regulations that limit their distribution (101).

II. Maldistribution of Resources

The distribution of human and physical resources seems to be poor regardless of the rate of these resources. Most of the Yemeni and Sudanese psychiatrists are concentrated in the capital cities (117,145). Out of 18 federal states in Sudan, 6 do not have fully-equipped psychiatric hospitals, and are run by non-specialists (117). In rural areas of Iraq, mental healthcare services are either unavailable or of poor quality, pushing people to travel for specialized services, seek private care or not seek care at all. Two of the four psychiatric hospitals are located in Baghdad (101). As psychiatric care has been historically provided by two psychiatric hospitals in Libya in urban areas, people living in rural areas might have had limited access to care (119,170). In South Sudan, rural areas are entirely deprived of mental-health services that scarcely exist in some urban locations (106).

3. Healthcare Organization

I. Integration of Mental Health Services into PHC

In EMR, mental health integration into PHC is either absent or sub-optimal. Nevertheless, conflict-induced scarcity of resources amounts to an opportunity to embark on, or improve, integration of mental care into PHC.

As primary mental-health services are in effect offered by psychiatrists working in PHC centers in Palestine, communication between non-specialized physicians and psychiatrists in the same PHC center is poor, and mental health integration into PHC is unsatisfactory (150).

In post-2003 Iraq, the consensus among policymakers was in favor of deinstitutionalization, which is moving from inpatient to community provision of care. Since 2008, the Iraqi government started to integrate mental healthcare in collaboration with International Medical Corps, but data measuring impact on access to mental healthcare is mixed. Additionally, NGOs- and academic-institution-led initiatives were inaugurated during the same periods (141,142). Doctors Without Borders (MSF) offered a training on psychological counselling at primary-level, which was shown to improve clinical outcomes of patients after three years of the program (171). Another initiative, by Johns Hopkins University and Heartland Alliance International, provided evidence-based training on cognitive behavioral therapy in PHC. As a result, the program was met with positive attitude from both clients and providers (87). In 2019, a fact-checking report indicated that although mental health services are increasingly becoming available at primary-care level in Iraq, the overall care remains institutional and biomedical, and PHC centers offering mental-health services are unequally distributed in practice. Moreover, effective organization of integration is lacking. For instance, due to the unclear national

guidelines on doctors' autonomy and fear of causing addiction, PHC physicians avoid prescribing certain medications (101).

While mental healthcare in pre-conflict Syria was entirely institutional, a shift towards mental health integration into PHC has started to take place by training non-specialists and inclusion of psychotropics in insurance coverage. Although the effect on access to mental healthcare has not yet been studied, a report revealed that the attitude of HCWs towards psychiatric medications, which were once considered as narcotics, has witnessed a positive shift (112). Likewise, efforts to integrate mental healthcare into PHC started one year after the eruption of the South Sudanese civil war in 2013 (161). A paper published in 2019 identified two barriers to full-scale integration: lack of funding in light of other national priorities, and poor quality of care (112).

In Yemen, although a report mentioned that the WHO announced in 2016 that it intends to train non-specialists on mental healthcare, no other data was found to elucidate this (145).

II. Competency, supervision and training of health personnel

In Palestine, nurses who work in mental healthcare essentially expressed their dissatisfaction about the quality of care they provide for several reasons, according to a qualitative study. First of all, there is a lack of supervision, guidance and training. Some nurses said they often worked as a clerk instead of actually providing mental healthcare services. Moreover, many were exposed to risks during their commuting to the workplace. This comes atop the insufficient number of human resources in Palestine. Against this background, little formal support is available to support their resilience (107,151). Similarly, psychiatrists in a Sudanese study reported that lack of motivation is the reason behind migration of HCWs (104).

In contrast, in a study conducted in Iraq, almost all providers and directors thought that the organizational climate is supportive, and most thought that leadership is competent. Still, some complained about the HCWs' attitude toward mental health. Another interview-based report revealed that HCWs lack satisfactory experience to provide mental health services, especially PHC physicians, nurses and social workers. From the perspective of the user, the same study in Iraq indicated that participants do not identify understanding by providers as a barrier. The vast majority of clients said that providers are caring, respectful and good listeners (87). On the other hand, people often refrained from seeking mental health services in South Sudan because they themselves or others had previous bad experience (106).

III. Cultural Competence of HCWs

One unreferenced report states that, amid the impact of conflict atrocities on personal agency, providers as helpers may create power hierarchy and disempower patients

(172). Another report states that providers should address the needs of patients without using the western biomedical approach that relies on labels and jargons, and should benefit from the facilitating role of religion and fate in the Syrian culture (124). The HealthNet TPO intervention in Afghanistan showed how women expressed gender-based violence using local idiom, such as “feeling of sadness” instead of directly describing violence (92).

IV. Language Barriers

As services are sometime offered by foreign professionals in emergency, as is the case in Syria, language can emerge as a barrier, which stresses the need for competent and trained interpreters (131,172). This is more challenging in multi-linguistic countries such as South Sudan where most professionals speak Arabic or English while people use a multitude of local languages (106).

Discussion

This review aimed to explore the literature for demographic, sociocultural, financial, logistic and health system-related factors influencing access to mental health treatment services among adults in conflict-affected areas of EMR. It also aimed to explore the knowledge and attitude towards mental health and healthcare. Andersen's behavioral model was modified and used to assess data from grey and academic literature. The findings detail many barriers and few facilitators, showing similarities and differences between different areas, but three factors were found to be influential in most areas: beliefs and stigma towards mental health and healthcare; availability of physical and human resources; and the extent of mental health services integration into primary healthcare.

As only 24 scientific studies/reports from nine areas were included, this review exposed the paucity of scientific research addressing mental health in conflict-affected areas. Scientific literature is more available in certain countries (e.g. Iraq) than in others (e.g. Yemen and Libya). Particularly, there is a lack of quantitative and qualitative research explicitly exploring the factors influencing access to mental health services, as did only one included study from Afghanistan (86). Reports were often based on expert opinions, and some rely on non-triangulated interviews. Moreover, disaggregated data on these factors by age, gender, socioeconomic status or level of education is limited to a few studies. This is despite the expected influence of gender norms on the autonomy of women, especially that the social life in the region is dominated by these norms. There is also a dearth of studies addressing people living with a particular mental disorder, such as PTSD.

Without a satisfactory evidence-base on the scale of problems of mental health, neither the discovery nor the delivery of cost-effective interventions would be feasible. The research gap is rooted in the lack of interest in mental health at multiple levels, including policymaking, academia and clinical training, as stakeholders do not perceive mental health as aligned with national priorities, resulting in lack of funding, planning and leadership in mental health research. It is difficult to channel attention to mental-health research as long as the beliefs about the causes and treatment of mental illnesses, among the populations and HCWs alike, are frequently non-medical, as revealed by this review. Additionally, the scientific culture in conflict-affected areas of EMR tends to focus on the poor indicators of physical health, which masks the huge burden and treatment gap of mental disorders. This is further exacerbated by the misalignment between donors' interests and national priorities in LMICs, and the existing weakness of academic research in general in the EMR (173,174). Universities lack an enriching research culture, and rarely fulfil their mentorship obligations. In view of this, students, for example, participate in limited research, mostly for degree fulfilment rather than career development (175). Fortunately, the global attention to the burden and treatment gap of mental disorders, especially in LMICs, provides a rationale for enhancing mental-health

research, but the challenge lies in translating the conclusions of global health research into national-level policymaking.

Stigma and negative beliefs around mental health are global barriers to accessing mental-health services, and, therefore it is unsurprising that the case holds true for conflict-areas in EMR. Still, stigma is even more relevant to conflict. Essentially, conflicts almost always occur in LMICs, where stigma is more pervasive as compared to HICs (176,177). This review provided considerable evidence that stigma predates the start of the conflict as widespread notions about mental illnesses are rooted in the sociocultural norms of societies. Stigma worsens, and is worse by, other negative beliefs such as superstitions and toxic masculinity, especially that religion and gender norms largely shape the social life in EMR long before conflicts. If anything, the co-occurrence of conflict and the global attention to mental health may have contributed to the overall picture in which stigma might have been slightly reduced compared to the past (178,179). Above all, stigmatizing attitudes and perceptions of mental health, especially among health workers, worsen the lack of professional and political will to improve policymaking in mental health. If negative beliefs about mental health are present among those who deliver the service, it would be hard to propose and implement changes in policies to improve mental healthcare. Finally, the fact that stigma is widespread globally, in peacetime and wartime alike, does not make it less worthy of attention because it limits access to care.

Research on anti-stigma interventions is intensive. Contact-based education, whereby an educational component is accompanied by direct or video-based contact with patients, has been repeatedly cited as the dominant approach to tackle stigma in mental health (180,181). For instance, a large anti-stigma campaign in Hong Kong was executed in 255 secondary schools, where video-based contact and education showed improved results when compared to education alone. However, many evaluation studies suffered methodological drawbacks; provided no evidence on long-term effect; and mostly did not examine behavioral changes (182). Although interventions against stigma have increased in HICs lately, few have been implemented in LMICs where mental health is not prioritized. There is also a vicious cycle in which stigma limits access to mental healthcare services, while limited access, on the other hand, makes it harder to channel anti-stigma campaigns into healthcare practice. Above all, implementation of effective anti-stigma interventions requires substantial investment in resources and manpower to bring about sustainable outcomes. These challenges make it harder to transfer anti-stigma interventions to LMICs. Even more so for conflict-affected areas where the lack of resources is extreme, especially during conflicts where governments lose control over their territories, and where mental healthcare is barely provided by emergency services. Efforts to reduce stigma in such settings can be rather incorporated into existing schemes of mental healthcare delivery. For instance, the knowledge, attitude and behaviour of HCWs regarding mental health is expected to improve the quality of and access to mental-health services.

Moreover, when anti-stigma campaigns were implemented in LMICs, they mostly lacked cultural sensitivity in modelling and measurement as they relied on Western paradigms, although the genesis and perpetuation of stigma are mostly entrenched in the social and cultural norms (183). This is part of the general tendency in global mental health to overlook the context-specific aspects of mental health in LMICs. An exception is a large contact-based, anti-stigma campaign in rural India that utilized cultural components, such as the Indian theatre. When evaluated, measurements also employed cultural-sensitive methods, and revealed significant improvement in attitude and behaviour (184). Similar culturally-sensitive approaches were also used in Lebanon and Malawi (185,186). This is particularly relevant in conflict-affected areas where trauma, violence and gender norms warrant further attention to the local and cultural context in the implementation of anti-stigma interventions.

In all conflict-affected areas, human and physical resources are either in severe shortage or unevenly distributed. While the lack of resources frequently preceded the start of the conflict, it worsened afterwards. This is because wars inflict damage upon physical resources and induce migration of skilled HCWs. Meanwhile, fragile governments fail to rectify resource unavailability and maldistribution because conflicts fundamentally limit state control and reduce the capability to provide services, and post-conflict state diverts attention away from mental health when other priorities take precedence.

Unavailability and maldistribution of resources are rooted in incompetent policymaking at macro-level where the lack of political will and governmental fragility lead to poor planning and insufficient funding for mental health. First of all, the efforts to compensate for the lack of resources are limited. Psychiatric training for doctors and clinical programs for nurses are lacking in many areas (e.g. Libya and Palestine), and integration of mental health into PHC is insufficient (e.g. Iraq). Even when the policies to solve the lack of resources are in place, they are often ineffectively implemented. For example, the reliance on psychiatrists instead of family physicians in PHC limits scalability of integration in Palestine. Furthermore, the perception and attitude towards mental health among health workers negatively influence the political will to tackle resources insufficiency. Planning for mental healthcare is also poor in other conflict-affected areas globally. In Ukraine and Georgia, two conflict-affected LMICs, resources are unequally distributed, even when adequately available. In these areas, the rates of inpatient facilities and psychiatrists are sufficient but the vast majority are concentrated in cities (187,188).

By exploring healthcare organization in conflict-affected areas, mental health integration into PHC was found to be a facilitator, while its lack was identified as a barrier to accessing services. Integration as a facilitator can be understood as a solution to the barriers of stigma and scarcity of human and physical resources. Training of non-specialist HCWs is particularly relevant in conflict-affected settings for several reasons. First of all, integration helps ameliorate stigma in conflict-affected areas by providing

more acceptable and hence more accessible services as the provision of both physical and mental health services occurs in the same place. It can also offer stigma-reduction education at community level. Secondly, provision of mental health services by non-specialists is cost-effective as it compensates for the lack of specialized resources in conflict-settings and reduce spending on inpatient care. In addition, availability of services closer to people reduces the costs of institutional care, and maintains the support that is key to mental well-being.

In most cases, mental health integration into PHC has been proven to increase access to mental healthcare services using varied models and covering different geographical areas. The case of Neuquén Province in Argentina, a LMIC, provides an example of successful integration of mental health into PHC. The plan of integration was warranted by the lack of specialists, and premised on a collaborative model. PHC physicians were trained to detect and treat mental disorders, and to refer complex cases to more trained PHC physicians and psychiatrists. This led to improving access to services, treatment outcomes and patient satisfaction. Alternatively, in Belize, another LMIC, integration of mental health was based on a nation-wide two-phase training of psychiatric nurses rather than physicians. By 2002, nine years after the initiation of the training, case detection increased by 25% while hospital admission decreased (14). Likewise, independent nurse prescription of medications in mental-health settings, in which nurses can prescribe medications for certain mental disorders, has been proven safe and effective in the UK (189).

The transferability of different models of mental health integration into PHC is limited by the contextual settings of each conflict-affected area, such as conflict intensity, geographical barriers, and healthcare system structure and resources. The focus shifts from provision of humanitarian services by NGOs at the beginning of the conflict towards strengthening the fragile healthcare system to take over governance in post-conflict settings. Therefore, integration is extremely challenging during conflicts. Still, any degree of provision mental health services by non-specialists is expected to partially compensate for the lack of resources, decrease stigma and improve access to mental healthcare, especially that provision of mental health services by non-specialists is often the only viable option.

Moreover, international guides, mainly mhGAP, adopt a biomedical approach to mental health that tends to downplay local variations, including cultural variation in explanatory models, illness experience, stress idioms and resilience to stress (190–192). Conflicts cause additional contextual patterns of psychological problems that are not addressed in integration guides (193). Trauma and resilience, especially in protracted conflict, occur at communal level, which tend to be over-diagnosed as PTSD when relying on biomedical criteria. On the other hand, HCWs are affected by their cultural context, further limiting the applicability of integration (194,195). For instance, this review revealed that HCWs might have stigma towards mental health, and are influenced by the dominant

explanatory models. Above all, fragile states in conflict and post-conflict settings have weak healthcare systems and lack mental health policies, both constitute a barrier to sustainable and scalable integration of mental health into PHC. For example, weak healthcare systems are incapable of providing proper supervision and incentivization of HCWs to adapt to the new changes in service delivery (193,195). Moreover, conflicts erode trust in government and its healthcare system, as exemplified by the case of Syria, making people resistant to new changes in policies. However, sustainability and scalability are not the main concern during the emergency phase of conflict, where the state is not able to deliver health services, and thus any integration of mental health by service providers is expected to be beneficial.

The modified Andersen's framework was helpful in categorizing the findings. The framework labels findings as mainly personal and intrinsic (predisposing), or environmental and social (enabling), which is constructive to understand access to mental healthcare. Moreover, mental healthcare, as historically overlooked, requires a comprehensive analysis of healthcare system policies, resources and organization, which is adopted in Andersen's framework. Despite its usefulness, some factors could not be understood as mutually exclusive to one category. Stigma, for instance, is a health belief yet it is largely influenced by community support and social structure. Insurance and income cannot be discussed separately. Furthermore, the consideration of environment and health needs was among the reasons to choose the framework, yet little findings were found in the literature. Mental-health frameworks should separately categorize the factors related to mental-health: stigma, health beliefs, traumatic events, community support and healthcare organization.

This review has a few limitations. First of all, it is dominated by grey literature due to the dearth of academic studies on mental health in the region. Although some reports conducted by international organizations employed scientific methodology, others were subject to personal opinions, limiting the validity of such reports. Secondly, the bulk of literature offered provider-side perspectives, as is the case in most expert-opinion reports. Moreover, due to time constraints and the regional focus of the review, it was infeasible to contact governmental institutions to obtain specific data that might have been attainable if the review had a focus on one country.

On the other hand, this study is the first to review access to mental healthcare services in conflict-affected settings in EMR, where the treatment gap is huge. Furthermore, the review put naked numerical statistics into context to move away from number-driven conclusions. For instance, health resources were linked to the efficiency of distribution, and global comparisons were drawn where applicable.

Conclusions

This review aimed to explore the academic and grey literature for potential factors, as barriers and facilitators, influencing access to mental healthcare treatment services among adult population in conflict-affected areas of EMR from the provider's and user's perspectives. Using Andersen's Framework, the review explored a wide array of factors: demographic, sociocultural, and financial factors; factors related to knowledge and attitude towards mental health and healthcare; and health-system related factors. Because no study has reviewed the literature for access to mental healthcare treatment services, especially in EMR, this study provides the basis for conducting specific research and guiding policymaking in the region.

Although a variety of factors was limited to certain areas, many were reported more frequently. These are beliefs and stigma towards mental health and healthcare; availability of physical and human resources; and the organization of service delivery, namely the extent of mental-health integration into PHC. Other factors were often reported, albeit to a lesser extent. These are community support; distance, transportation and travel time; and funding for mental health. Of note, reported barriers and facilitators often affected each area differently. For example, mental health policy and organization have made progress in post-conflict Iraq, while the governments of Yemen and Somalia barely have any control over wide swaths of territories, limiting the capability to implement policies. The evidence supporting these findings is insufficient. The findings were frequently based on unsubstantiated reports and expert opinions, while academic literature was more available in certain areas, such as Iraq. This conforms to the finding that little attention is given to mental health in the region, including in academic research.

Stigma towards mental health seems to be prevalent in all conflict-affected areas of EMR. Stigma was reported as negative perception of mental health; negative attitude and behaviour towards people with mental illness; stigma-by-association; using offensive wording; stigma from and against HCWs; and structural stigma. Other beliefs about mental health, such as supranatural explanatory models and toxic masculinity, continues to influence perceptions of mental health in the region. Contact-based stigma interventions are considered the most effective method to fight stigma. Although anti-stigma interventions have shown promising results in HICs, transferability of these interventions to conflict-affected areas in LMICs is limited by the paucity of evidence on effectiveness of these interventions in LMICs; lack of cultural sensitivity in implementation and measurement; and lack of interest in mental health. Still, the recommendation is to incorporate contact-based methods in existing cultural platforms that consider cultural and contextual aspects, such as cinema and TV, wherever feasible.

Training of non-specialized HCWs to deliver mental-health services in emergency settings, and integration of mental health into PHC in post-conflict settings, seem to mitigate the lack of human resources in conflict-affected areas. Most of the attempts to

integrate mental health into PHC in LMICs have shown promising results. However, training and integration are challenged by the neglect of culture and context in training guides; the fragility of healthcare system; and the absence of mental health policies. However, training curriculums can benefit from international cultural guide so as to consider local cultural and contextual variations in a case-by-case approach. Moreover, nurses can be trained to detect and treat common mental disorder instead of doctors in cases where nurses are more available.

Little was found on the influence of gender on access to mental health services. The extent to which the notion of toxic masculinity and the constraints on women's autonomy limit access to these services remains unanswered, despite its expected importance. Moreover, factors such as age, socioeconomic status and traumatic events need further exploration. More scientific research is recommended in conflict areas to address these unanswered questions. This certainly requires the political will, financial investment and academic interest in mental health to improve capacity-building in research.

Recommendations

Contextual variations between areas make the following recommendations context-related, and thus they should be locally adapted. The variation is especially profound between conflict settings, on the one hand, where the emergency-phase dominates, and post-conflict state, on the other, where health-system strengthening is the objective.

Humanitarian partners during conflict, and post-conflict governments are recommended to provide culturally- and contextually-adapted training for non-specialized HCWs. Training curriculum can benefit from international guidelines on adjusting clinical assessment to cultural and contextual variations. For instance, DSM-5 contains the Cultural Formulation Guide (CFI) that provides guidance on incorporating social context and cultural identity into clinical assessment (196). Then, the curriculum should identify how conflicts influence the local idioms of stress expression to further modify the rigid guidelines.

Humanitarian and governmental stakeholders should choose the target HCWs based on situational analysis of the most available human resources in conflict and post-conflict settings, whether it be physicians and/or nurses. This is underpinned by the notion that integration is fundamentally task-shifting of uncomplicated services from the less-available specialists to the more-available non-specialists as long as the latter can deliver those services. As previously mentioned, provision of mental-health services at PHC level was successfully executed by nurses in Belize and the UK (14,189).

Since stigma against mental health is rooted in the sociocultural norms, such as the use of labels and offensive words, mental-health perceptions should be addressed at an institutional, collective level that considers the local context of conflict and culture. Post-conflict government and media professionals should incorporate stigma-reduction efforts into media and culture platforms, such as cinema, documentaries and TV to induce a change in thinking patterns by reaching out to the largest-possible target population. Cinema, documentaries and TV have been witnessing an improvement in many countries across the region, as exemplified by the two Palestinian features: *Omar* (2015) and *5 Broken Cameras* (2011), and the two Syrian documentary features: *For Sama* (2019) and *Last Man in Aleppo* (2017), all were nominated for the Academy Awards (the Oscars). Moreover, lingual and cultural similarities in the region make advocacy through cultural platforms feasible as people in Iraq, for instance, can understand and relate to Jordanian cinema. This form of video-contact anti-stigma advocacy needs collaboration between the ministries of culture, finance and health to channel funding and policies towards the end of fighting stigma, warranted by the high burden of mental disorders.

Further research based on scientific validation of data is recommended to guide policymaking in mental healthcare in conflict-affected areas of EMR, warranted by the high burden of mental disorders during and after conflicts. Researchers are recommended

conduct qualitative exploratory research at national-level, whereby the general factors influencing access to mental health services are first identified in each area, while more focused research follows. Quantitative research can also measure the effect of age, location, indicators of socioeconomic status, traumatic events and extent of danger on access to care.

Meanwhile, capacity building in mental-health research should be addressed at academic, organizational and institutional levels simultaneously, and thus collaboration between multiple stakeholders (the government, international donors, NGOs and research centers) is key. Experiences in which international NGOs acted as an intermediary involving all stakeholders are proven effective and sustainable (197,198). Post-conflict governments and donors should set priorities based on the burden of diseases, and universities should embrace research culture by adopting research-favorable curriculum, offer research careers for graduates, and encouraging the establishment of research networks and associations (focused on mental health).

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