# The state of knowledge on posttraumatic stress disorder, depression and anxiety among refugee women in Africa: A scoping review

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# Abstract

With over 65.3 million people of concern under the United Nations High Commissioner for Refugees mandate, the world is facing its biggest humanitarian crisis since the Second World War. The World Health Organization states that war and disasters have a large impact on a person's mental health and psychosocial wellbeing, estimating that 5-10% of people who have experienced emergency situations suffer from mental health related problems. For refugee women in particular, research suggests that they have higher instances of mental health problems than other refugees which include depression, posttraumatic stress disorder, and anxiety. Using a scoping review methodology, this thesis examines the prevalence of refugee women's mental health problems in the African context. It examines the experiences of these women living in African camps and the availability and accessibility of mental health services during their residency. Upon completion of the scoping review, the literature reveals that there is a high occurrence of mental health problems among refugee women residing in African camps. Furthermore, with relation to services it was found that varied mental health services are present but lack qualified personnel. Lastly, four themes emerged regarding refugee women's experiences: violence, family life and losses, poor quality of life, and coping mechanisms.



*Keywords: African refugees, women, mental health, psychosocial health, depression, anxiety, PTSD, refugee camps*

# Résumé

Avec plus de 65, 3 millions de personnes sous la charge du mandat des Nations Unies Haut Commissariat pour les Réfugiés, le monde fait face à une crise humanitaire. L'organisation mondiale de la santé constate que les situations de conflits et de catastrophes ont un grand impacte sur la santé mentale et le bien-être psychosocial, et estime que 5 à 10% des personnes ayant fait face à des situations humanitaires souffrent de problèmes liés à la santé mentale. D'après la littérature, les réfugiées ont plus de problèmes de santé mentale comparées aux hommes, notamment la dépression, l'anxiété et le trouble de stress post-traumatique. A l'aide d'un examen de la portée, cette thèse vise à identifier la prévalence des problèmes de santé mentale énumérés ci-dessus parmi des réfugiées résidant dans des camps africains ; la disponibilité et l'usage des services de santé mentale ; et finalement les expériences des refugiées. L'inspection de la littérature a révélé une prévalence significative de problèmes mentaux chez les réfugiées résidant dans des camps Africains. De plus, un thème concernant les services et leurs usage ont été identifiés : la variabilité des services disponibles avec un manque de personnes qualifiées. Quatre thèmes ont émergé quant aux expériences des réfugiées : la violence, la perte et la vie familiale ; une mauvaise qualité de vie ; et des moyens d'adaptation.

Mots-clés : Réfugiées Africaines, santé mentale, santé psychosociale, dépression, anxiété, trouble de stress post-traumatique, camps de réfugiés

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Egziabeher Yemesguen!

## Femme noire

Femme nue, femme noire
Vêtue de ta couleur qui est vie, de ta forme qui est beauté
J'ai grandi à ton ombre ; la douceur de tes mains bandait mes yeux
Et voilà qu'au cœur de l'Eté et de Midi,
Je te découvre, Terre promise, du haut d'un haut col calciné
Et ta beauté me foudroie en plein cœur, comme l'éclair d'un aigle

Femme nue, femme obscure
Fruit mûr à la chair ferme, sombres extases du vin noir, bouche qui fais lyrique ma bouche
Savane aux horizons purs, savane qui frémis aux caresses ferventes du Vent d'Est
Tamtam sculpté, tamtam tendu qui gronde sous les doigts du vainqueur
Ta voix grave de contralto est le chant spirituel de l'Aimée

Femme noire, femme obscure
Huile que ne ride nul souffle, huile calme aux flancs de l'athlète, aux flancs des princes du Mali
Gazelle aux attaches célestes, les perles sont étoiles sur la nuit de ta peau.

Délices des jeux de l'Esprit, les reflets de l'or ronge ta peau qui se moire

A l'ombre de ta chevelure, s'éclaire mon angoisse aux soleils prochains de tes yeux.

Femme nue, femme noire
Je chante ta beauté qui passe, forme que je fixe dans l'Eternel
Avant que le destin jaloux ne te réduise en cendres pour nourrir les racines de la vie.

*Léopold Sédar Senghor, Chants d'ombre*

# Table of Contents

**Abstract** ........ ii

**Résumé** ........ iii

**Acknowledgements** ........ iv

**Femme noire** ........ v

**Table of Contents** ........ vi

**List of Tables** ........ viii

**List of Figures** ........ viii

**List of Abbreviations and Acronyms** ........ ix

**Thesis Outline** ........ xi

**Introduction** ........ 1

**Chapter 1: Background** ........ 4

**1.1. An Overview on the Concept of *Refugee*** ........ 4

1.1.1. The production of refugees in Africa ........ 4

1.1.2. Explaining international migration and forced displacement ........ 6

1.1.3. The Refugee Regime complex ........ 7

1.1.4. The semantics of the refugee ........ 8

**1.2. The Roots of the Concept of Mental Health** ........ 9

1.2.1. What is mental health? ........ 9

1.2.3. Social determinants of mental health ........ 10

1.2.4. Policies and recommendations for mental health services in humanitarian settings ........ 11

**1.3. Issues of Forced Displacement and Mixed Migration in Africa** ........ 12

1.3.1. African conflicts in the 20th and 21st centuries ........ 12

**1.4. Refugees and Mental Health: A Literature Review** ........ 14

1.4.1. Gap in the literature the study is aiming to address ........ 16

**1.5. Research Questions and Objectives** ........ 16

**1.6. Rationale** ........ 17

**Chapter 2: Methodology** ........ 18

**2.1. Step 1: Research Questions and Objectives** ........ 18

**2.2. Design: A Scoping Review** ........ 18

2.2.1. What is a scoping review? ........ 18

2.2.2. Why a scoping review? ........ 19

2.2.3. Methodological approach ........ 19

**2.3. Inclusion Criteria** ........ 20

**2.4. Peer-Reviewed Literature** ........ 21

2.4.1. Step 2: Identifying relevant studies : Database search for peer-reviewed literature: ........ 21

2.4.2. Search results 22
2.4.3. Step 3: Study selection 23
**2.5. Grey Literature 25**
2.5.1. Step 2: Identifying relevant studies: 26
2.5.2. Grey literature screening 26
2.5.3. Step 3: Study selection 26
**2.6. Bibliography Search: 29**
2.6.1. Step 2: Bibliography search 29
2.6.2. Step 3: Study selection 29
**2.7. Included Studies 30**
**2.8. Step 4: Charting The Data: Data Extraction 31**
**2.9. Step 5: Collating, Summarizing, and Reporting the Results 31**

**Chapter 3: Results 32**
**3.1. Descriptive Summary of Selected Literature 32**
**3.2. Tabular Summary of the Literature 33**
**3.3. Presence of Mental Disorders 46**
3.3.1. Posttraumatic stress disorder 46
3.3.2. Depression: 47
3.3.3. Common mental disorders (CMDs): 47
**3.4. The Mental Health Services Available Across the Refugee Camps 48**
**3.5. The Refugee Women's Experiences 50**
3.5.1. Violence 50
3.5.2. Family life and losses 51
3.5.3. Quality of life 52
3.5.4. Coping mechanisms 53

**Chapter 4: Discussion 55**
**4.1. Mental Health Discourse 55**
**4.2. Limitations 57**
**4.3. Gaps Identified and Future Directions 58**
**4.4. Conclusions 61**

**References: 63**

**APPENDICES 78**
**APPENDIX A – Protocol 78**
**APPENDIX B – Embase search 81**
**APPENDIX C – Medline search 82**
**APPENDIX D – PsycInfo search 85**
**APPENDIX E – CINAHL search 86**
**APPENDIX F – Global Health search 90**
**APPENDIX G – Sociological Abstracts search 91**
**APPENDIX H – PILOTS search 92**
**APPENDIX I – Pubmed search 93**
**APPENDIX J – Reference list of the 45 full text articles screened 94**
**Appendix K – Table 7: Tools used to screen/diagnose mental health disorders 97**

## List of Tables

Table 1:Scoping review frameworks **19**

Table 2: Key concepts and search words **20**

Table 3:The selection process from the 8 databases searched **25**

Table 4: List of grey literature sources searched, search methods and results **27**

Table 5: List of included studies and their sources **30**

Table 6: Refugees countries of origin and their host countries **33**

**Table 7: Tools used to screen/diagnose mental health disorders in the included studies 97**

## List of Figures

Figure 1: Databases searched and studies found **22**

Figure 2: Pie chart of excluded articles by reason of exclusion **24**

Figure 3: PRISMA Flow Diagram **30**

## List of Abbreviations and Acronyms

**APA** – American Psychiatric Association

**AU** – African Union

**CAR** – Central African Republic

**CIDI** – Composite International Diagnostic Interview

**CINAHL** – Cumulative Index to Nursing and Allied Health Literature

**CMD** – Common Mental Disorders

**DD-NOS** – Depressive Disorders – Not Otherwise Specified

**DSM** – Diagnostic and Statistical Manual of Mental Disorders

**DRC** – Democratic Republic of Congo

**FGD** – Focus Group Discussion

**IASC** – Inter-Agency Standing Committee

**IDP** – Internally Displaced Person

**IOM** – International Organization for Migration

**IP** – Istanbul Protocol

**IRIN** – Integrated Regional Information Networks

**JBI** – Joanna Briggs Institute

**LMIC –** Low and Middle Income Country

**LTE** – Lifetime Traumatic Events

**LNHCR** – League of Nations High Commissioner for Refugees

**MDD** – Major Depressive Disorder

**MHPSS** – Mental Health and Psychosocial Support

**MSF** – Médecins Sans Frontières

**NGO** – Non-Governmental Organization

**OATD** – Open Access Theses and Dissertations

**OAU** – Organisation for African Unity

**PDS** – Posttraumatic Stress Diagnostic Survey

**PHR** – Physicians for Human Rights

**PILOTS** – Published International Literature on Traumatic Stress

**PND** – Post Natal Depression

**PTSD** – Posttraumatic Stress Disorder

**SES** – Socio-Economic Status

**SGBV** – Sexual and Gender Based Violence

**UNHCR** – United Nations High Commissioner for Refugees

**WHO** – World Health Organization

**WRC** – Women's Refugee Commission

# Thesis Outline

**Introduction:** A short introduction will serve as a *mise en contexte*, relating the current state of the world, and most importantly Africa regarding forced displacement.

**Chapter 1:** Chapter 1 will give brief background information on the thesis topic starting with the concepts of refugee and mental health. This will be followed by an overview of the conflicts in the African continent since the late 20th century. Finally, the research questions will be presented, along with a rationale and the identified gaps.

**Chapter 2**: A detailed account of the steps undertaken throughout the scoping review is given in this chapter.

**Chapter 3**: This chapter consists of a presentation of the findings from the scoping review, first through a descriptive summary; then using a tabular summary, relevant data from each included study is charted with the aid of pre-formulated questions. The findings from the results as well as the main themes that emerged from the examination of the included studies are presented in this chapter

**Chapter 4**: This chapter will present the discussion from the findings, the limitations as well as the identified gaps and the implications for future research. Finally this chapter will close with a short conclusion.

# Introduction

Human kind has been moving to discover, visit, and even conquer the world for as far back in time as one million years ago (Finalyson, 2005). Some movements are voluntary, while others are forced by negative circumstances. The International Organization for Migration (IOM) (2016) defines migration as:

> The movement of a person or a group of persons, either across an international border, or within a State. It is a population movement, encompassing any kind of movement of people, whatever its length, compositions and causes; it includes migration of refugees, displaced persons, economic migrants, and persons moving for other purposes, including family reunification.

It is when coercive elements—either natural or man-made—directly threaten people's livelihood that migration becomes forced (IOM, 2016). Such is the case in times of war and religious and political turmoil where millions of people eventually seek refuge away from life-threatening circumstances.

Since the beginning of the 21st century, there is a staggering 65.3 million displaced persons—of which 21.3 million individuals are refugees (United Nations High Commissioner for Refugees (UNHCR), 2016a). News broadcasts on the topic are plagued by gruesome accounts of people's desperate attempts to reach safety including the boarding of boats filled past their capacity through perilous waters ("Since Alan Kurdi died, Mediterranean deaths have soared", 2016). In light of the growing mass-displacement of people from war-torn

countries, the perceptions of refugees as an imminent threat has propelled nations to tighten border policies against incoming populations (McFayden, 2012). [1]

Amidst fear and disparagement of the events resulting in the influx of refugees, the Global North often argues that its inabilities to host refugees are due to economic restraints (McFayden, 2012). These notions of refugees as economic burdens are however further amassed among low- and middle-income countries (LMICs), as both sources of and hosts to refugees (UNHCR, 2016a). For example, Sub-Saharan Africa is home to over 18 million people of concern[2], hosting over 29% of the world's refugee population from ongoing conflicts such as those in the Democratic Republic of Congo and Central African Republic; volatile situations in Somalia; and new conflicts in Burundi and South Sudan (UNHCR, 2016b). Protracted refugee situations, characterised as "[s]ituations where refugees have been in exile for 5 years or more after initial displacement, without immediate prospects for implementation of durable solutions" (UNHCR, 2003, p.1), have seen generations of refugees living in camps. Initially meant to be temporary, living in refugee camps has become deceivingly permanent, with residencies averaging 17 years (UNHCR, 2014)[3]. These protracted situations incite a sense of hopelessness among the camps' inhabitants, thereby causing further detriment for refugees and any mental health issues sustained from the events leading to their displacement (Loescher, 2008).

Emergency situations have been associated with an increased onset of adverse mental health problems, and the exacerbation of pre-existing mental disorders. According to the World Health Organization (WHO) (2010), between 5% and 10% of people who have

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[1] An example of the anxiety towards refugees can be seen in Kenya wanting to close its largest refugee camp, Dadaab, following terrorist attacks (Integrated Regional Information Networks (IRIN), 2016)

[2] including refugees and IDPs

[3] an example of these trends is seen among Somalian refugees who have been displaced since the 1990s; this is also present among Afghan refugees residing in Pakistan (UNHCR, 2004)

experienced an emergency situation will develop severe mental health disorders. Additionally, social determinants such as economic status and living conditions are also significantly associated with mental health (WHO and Calouste Gulbenkian Foundation, 2014). Studies conducted among refugees have further concluded that mental health problems such as depression, posttraumatic stress disorder (PTSD), and anxiety are prevalent both in refugee camps and countries of resettlement. Refugee women were notably worse-off as they were found to suffer disproportionately more from these mental illnesses than men and women in their countries of resettlement (Kim, Torbay, & Lawry, 2007; Morof et al., 2014**;** Parmar, Agrawal, Greenough, Goyal & Kayden, 2012; Schweitzer, Melville, Steel, & Lacherez, 2006).

Through a scoping review, this study aims to elucidate the state of knowledge on PTSD, depression, and anxiety among refugee women residing in African refugee camps. First, an overview of the prevalence of this phenomenon found in previous literature will illustrate the significance of the issue. Second, the availability and accessibility of mental health services in these African refugee camps will be documented followed by an analysis of refugee women's experiences. Finally, a discussion will follow regarding gaps within the existing literature that are important points of inquiry to further knowledge practice towards the betterment of this destitute population.

# Chapter 1: Background

## 1.1. An Overview on the Concept of *Refugee*

Surprisingly, the notion of a refugee is a relatively new concept stemming from the post- World War II era. With multiple organizations adopting different definitions of what it means to be a refugee, the following sections will explicate pertinent contexts and developments for the purposes of this paper in the construction of the refugee.

### 1.1.1. The production of refugees in Africa

Enclosed by the Atlantic and Indian oceans and the Mediterranean and Red seas, Africa is the second largest continent, home to 1.225 billion people (16.1% of the world's population) ("Africa population (Live)", 2016.). Spread over 30.3 million square kilometres, 54 countries comprised of thousands of ethnic groups live within its frontiers abiding to a vast array of mores and traditions (Encyclopaedia Britannica Online, 2016).

The African continent was known as the Dark Continent from the Middle Ages well into the 19th century. The scramble for Africa through the 19th and 20th centuries was a period of annexation, division and colonization by western countries such as France, Great Britain, and Italy. The colonization of Africa played a pivotal role in the world's politics, being at the centre of rivalries between the big colonial empires (namely France, Britain, Italy, Germany). And by the eve of the First World War, Africa was almost entirely colonised (Shillington, 2005).

Zolberg (1983) elaborates that in African countries, the creation of nation-states following the hegemony of western empires played an important role in the existence of refugees in Africa (p.30). N'Dimina-Mougala (2007) expands on the conflicts in Africa by generating typologies of conflicts starting with conflicts of liberation from colonial power to

frontier conflicts stemming from the contestation of borderssecessionist conflicts resulting in ephemeral states; conflicts of identity; and, finally, conflicts of power and governance. Zeleza (2008) further categorizes the conflicts in Africa since the 20th century under five typologies of war: imperial wars, anti-colonial wars, intra-state wars, inter-state wars, and international wars. He claims that while they may differ by ideological and political drives, these types of wars are closely intertwined and can occur simultaneously (p.4).

The concept of a refugee inherently relies on the existence of a nation and its borders. Zolberg (1983) and Keely (1996) argue that refugee production stems from geopolitical structures wherein the creation of nation-states, characterized by homogeneous[4] citizens, lead to the marginalization of others in attempt to standardize and foster national identity. Aspects such as religion, ethnicity, language, territory, and traditions are implicated in the process of building national identity while the presence of political governance protects and ensures its prosperity. In fact, Keely (1996) suggests that when cohabitation between different ethnicities, religions, and identities is rendered impossible; multinationalism can be source of refugees; this is exemplified by ethnic cleansing that occurred in Rwanda[5] in the 90s which generated 200,000 refugees on April 28,1994 alone (Wilkinson, 1997). Moreover, the nature of the State can lead to ideological clashes wherein the political governance is not aligned with the wants and needs of the population; this can often times result in revolutions where religious ideologies can also constitute a basis for these revolution (Keely, 1996). Boko Haram in Nigeria and Al-Shabab in Somalia would be modern-day examples of these revolutions (UNHCR, 2016b). Lastly, Keely (1996) talks about “state implosion” (p. 1055)–a phenomenon that is the result of the absence of a sitting government, health care, education, justice system, and market (import/export) among others. State implosion results in the

[4] in terms of religion, ethnicity and language among other aspects
[5] Armenia and Bosnia are also given as examples of this phenomenon by the author

crumbling of the state and he cities Somalia, Rwanda, and Angola as examples of this scenario (Keely, 1996).

Conversely, Zeleza (2008) puts forth that while decolonisation and the building of nation-states may have had a role in the conflicts witnessed in Africa during the 20th century onward, he suggests that other aspects such as strife over power and resources are at the root of conflicts today, thereby creating disputes over the control of abundant or scare resources. Shillington (2005) also states that the most recent conflicts derive from power struggles (p.418) which he attributes to one-party states. Examples of these power struggles were seen in Somalia in 1959; Rwanda in 1994; Mozambique; Burundi; Chad; Sierra-Leone; Congo and South Africa. Similarly, dictatorial corrupt regimes were overturned in the Central African Republic (CAR), Uganda, and Equatorial Guinea (Shillington, 2005, p.427).

### 1.1.2. Explaining international migration and forced displacement

International migration encompasses the cross-border movement of people for any number of reasons including the search for better economic opportunities and the reunification of family members. Within this spectrum, forced displacement in particular is a result of the coerced migration of persons due to life-threatening circumstances (IOM, 2016).

Migration and, more specifically, forced displacement can be conceived using macro-, meso-, and micro-level theories (UNHCR, 2002). Macro theories imply a set of push and pull factors influencing a person's decision to flee. Push factors include violence, oppression, natural disasters, and persecution that lead to a person residing outside of his/her country of origin. On the other hand, pull factors attract a refugee to a given country, be it for reasons of proximity, conditions of life, or better economic prospects. Meso-theories frame migration as a set of networks and systems, implying interconnectedness between countries (the system) generated by networks which create support for incoming refugees. Micro-theories explain the individual factors that eventually lead to seeking refuge such as monetary considerations

and psychosocial support (UNHCR, 2002). It is further conceptualized that four sets of causal factors play a role in migration: Root causes which are also known as pre-migration conditions; proximate causes which are sudden causes that prompt migration such as conflict and violence; enabling conditions that are resources and policies which make migration possible; and lastly sustaining factors such as the presence of family and contacts that allow for a constant flow of migrants (UNHCR, 2002).

In the event of these causal factors, international migration and forced displacement are governed by action guidelines and policies put in play by international entities to respond to the refugee crisis, the Refugee Regime.

### 1.1.3. The Refugee Regime complex

After the First World War, the Refugee Regime was created in response to the mass displacement of people in Europe. First under the unofficial governance of the League of Nations High Commissioner for Refugees (LNHCR) it later became officially governed under the UNHCR to respond to the mass displacement following the Second World War and to implement and monitor the protection of refugees as stipulated by the 1951 Convention on the Status of Refugees. Although the UNHCR was created to respond to the needs of European refugees at the end of the Second World War, the organization is now responsible for the world's refugees, internally displaced persons (IDPs), stateless persons and asylum seekers. A manifold of guidelines and actors involved in the protection of refugees govern the regime, including the non-refoulement principle wherein any person seeking refuge cannot be refused entry into a country (Betts, 2010). The refugee regime's response is further governed by three solutions: repatriation, integration within a host country, or resettlement in a third host country (Betts, 2010).

### 1.1.4. The semantics of the refugee

After the 1951 convention, the term *refugee* is defined by the UNHCR (1979) as:

> [S]omeone who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside of the country of his/her nationality, and is unable to, or owing to such fear, is unwilling to avail him/herself of the protection of that country.

In 1969, The Organisation for African Unity (OAU, now African Union – AU), created in 1963, expanded this definition of *refugee* to incorporate the protection of people fleeing colonial oppression, disruption of public order, and external aggression, among other things (OAU 1969, Article 1). Similarly, in response to refugee crises in Central America, the Cartagena Declaration added to the UNHCR's definition by extending the term *refugee* to individuals whose human rights have been menaced (UNHCR, 2013).

These modifications and additions were in response to the growing and changing nature of refugees. In fact, McFayden (2012) argues that the original UNHCR definition of refugee does not encompass all present-day refugees and the refugees of the 21st century do not necessarily meet the criteria set by the convention. He argues that when the convention was originally drafted in 1951, it was imperative that the State was responsible for persecutions leading to the displacement of people such as fascist authoritarian governments and, more specifically, the Soviet Union. However, current refugees are fleeing persecutions that may be undertaken by non-state agents such as militia groups, or events that are not characterized as persecution such as natural disasters, general war zones, and gender-based violence.

## 1.2. The Roots of the Concept of Mental Health

### 1.2.1. What is mental health?

Mental health can be defined as "a state of well-being in which every individual realizes his or her potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2001, p.1). Mental health is an integral part of one's overall health where health in not the absence of disease but rather as a holistic wellbeing that encompasses social, physical, and mental wellbeing (WHO, 1948).

### 1.2.2. Mental disorders

The Diagnostic and Statistical Manual of Mental Disorders (DSM–V) (American Psychiatric Association (APA), 2013a) defines a mental disorder as:

> A syndrome characterized by clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning … [and is] usually associated with significant distress or disability in social, occupational or other important activities

There are 22 classifications in the DSM-V manual of which I will focus on 3, namely, depressive disorders, anxiety disorders, and trauma- and stressor- related disorders (APA, 2013a). This is due to a preliminary literature search on refugee women which evidences the high prevalence of mental illness which are mainly Posttraumatic Stress Disorder (PTSD), depression and anxiety (Kim et al., 2007; Morof et al., 2014; Schweitzer et al., 2006).

- Trauma- and stressor- related disorders are disorders that emanate from the exposure to traumatic and stressful events by experiencing it first-hand, witnessing it, or being afflicted by a loved one. This diagnostic criterion was newly added to the DSM-V and

includes PTSD. One-third to half of all individuals exposed to rape or politically- and ethnically-motivated repressions are estimated to suffer from some form of PTSD (APA, 2013b).

- Depressive disorders (DD) are marked by feelings of sadness, emptiness and irritable moods, which can be found in conjunction to somatic and cognitive symptoms impacting a person's ability to maintain function. DD encompasses a wide array of mood disorders ranging from premenstrual dysphoric disorders to major depressive disorders (MDD). The differences between these spells lie in the aetiology, duration and timing of the afflictions (APA, 2013c).
- Anxiety disorders are characterized by an "anticipation of future threats" and a state of vigilance (APA, 2013d). Different situations, and/or objects, can prompt avoidance, fear or anxiety in an individual. These disorders are more often than not present in PTSD, and are also a common feature of depressive disorders. Separate diagnostics (in the case of generalized anxiety disorders) are not made if anxiety appears during the periods of depression or if they can be better explained by symptoms of PTSD (APA, 2013d).

#### 1.2.3. Social determinants of mental health

Social determinants of mental health include conditions such as income, housing, employment, daily living conditions, and societal norms that affect one's health (WHO, 2016). Evidence suggests that common mental health disorders are significant among the poor and vulnerable; furthermore, youth with low socio-economic status are up to 2.5 times more likely to develop mental health problems compared to their counterparts[6] with higher socio-economic status. Aspects such as early life experiences, access to services and

[6] matched by age

education, parents, the household and communities have also been found to affect mental health (WHO and Calouste Gulbenkian Foundation, 2014).

#### 1.2.4. Policies and recommendations for mental health services in humanitarian settings

Mental and psychosocial health is an important contributor to the wellbeing of refugees; in fact, according to the World Health Organization, “mental health is an integral part of health; indeed, there is no health without mental health” (WHO, 2010). Despite the fact that mental illnesses, substance abuse, and neurological disorders account for 14% of the global burden, 75% of the affected population in low-income countries do not have access to treatment (WHO, 2014).

Furthermore, higher rates of psychosocial problems have been identified in the literature among refugees compared to the general population (Kim et al., 2007; Morof et al., 2014; Schweitzer et al., 2006); and in order to address such problems that may arise in refugee camps, organizations have come together with guidelines for mental health and psychosocial support (MHPSS) services in emergency settings; of which the Inter-Agency Standing Committee (IASC).

The IASC was founded in 1992 to strengthen humanitarian response. It is composed of a vast range of humanitarian organization heads, including different sectors of the United Nations (UN). The IASC Task Force on Mental Health and Psychosocial Support in Emergency settings addresses various gaps in the delivery of MHPSS. In fact, the IASC ascertains that mental health is indeed an important facet of health in emergency settings. And it calls for multi-layered and integral support systems, putting forth the intervention pyramid for mental health and psychosocial support in emergencies. It provides guidelines for minimal mental health responses, because the protection and improvement of mental health is one of its priorities (IASC, 2008, p. 5) stipulating that different levels of practices and interventions should be utilized to reach an adequate MHPSS (IASC, 2008). The IASC

guidelines urge to build on local capacities so as to ascertain sustainability of MHPSS. This is done through a multilayer support described below (IASC, 2010, p. 3). The pyramid, is composed of 4 layers, namely:

(i) Basic services and security such as by putting in place socio-culturally appropriate MPHSS and promoting them in a safe manner;

(ii) Community and family supports, on a larger scale, consists of providing accessible support systems at the community and family level in order for people to maintain their mental and psychosocial well-being. Examples are family reunification, supporting parenting programs, formal or informal educational activities; women's' groups and youth groups.

(iii) Focused non-specialized support to address the needs of people for whom the above-mentioned services were inadequate. This requires intervention by trained workers and includes basic mental health care by primary health care (PHC) workers.

(iv) Specialized support: this represent any additional support required for people whose needs were not met through the above mentioned services, hindering their daily functioning. These supports include psychiatric or psychological support when PHC doesn't meet their needs.

## 1.3. Issues of Forced Displacement and Mixed Migration in Africa

### 1.3.1. African conflicts in the 20th and 21st centuries

The mass displacement that is taking place in Africa is the outcome of ongoing political, economic and environmental pressure. Pedersen (2002) talks about "psychological warfare" (p.176) characterized by "terror and atrocities, mass executions, disappearances, torture, and rape"(pp. 176-7) when addressing the features of these wars. These turmoils are

also responsible for the exodus of millions, some repeatedly. For instance, nations such as Somalia have seen their people displaced on multiple occasions and the conflict taking place in the DRC continues to devastate the nation with the ongoing outpour of refugees from this region (UNHCR, 2016c). In the same way, South Sudan, recently founded in July 2011, fell into a civil war within two years after its creation, with millions displaced within the country and hundreds of thousands residing in refugee camps in neighbouring countries (British Broadcasting Corporation (BBC), 2014). Issues like political agitation, corruption and dissatisfaction with the ruling government in Burundi has produced thousands of refugees in the last year alone. The Central African Republic (CAR) is currently witnessing a gruesome civil war opposing rebel groups and government forces, and displacing millions in effect. Furthermore, Nigeria's struggle with Boko Haram (a terrorist group) has left millions displaced within and outside of the country (UNHCR, 2016c) These instances among others explicate the soaring numbers of refugees in Africa and worldwide. In fact, Somalia is the third largest producer of refugees (accounting for 1.1 million people) followed closely by South Sudan and Sudan by the end of 2015 with 778,700 refugees and 628,800 people, respectively. DRC, CAR, and Eritrea hold the 6th, 7th and 9th[7] places respectively (UNHCR, 2016c). Today, Sub-Saharan Africa is host to 29%[8] of the world's displaced population, with a 20% increase in the refugee numbers from the start of 2015 to the end of 2015. Increasingly, conflict afflicted countries are seen hosting refugees from neighbouring countries; fleeing dangerous territories for uncertain conflict stricken terrains; an example of this is the DRC, the world's 11th host of refugees[9] and 6th largest producer of refugees (UNHCR, 2016c). In addition to the production of refugees at a large scale, these conflicts

[7] Every day, thousands of Eritreans flee to Ethiopia to escape political instability (Prandi, 2016)

[8] Congolese, Nigerians, Sudanese, Somalis and South Sudanese were the largest displaced populations within Africa in 2015 (UNHCR, 2016c)

[9] among which are Rwandan refugees from the 90s, newly displaced refugees from Burundi, the CAR and South Sudan (UNHCR, 2016c)

are responsible for the disruption of the social structure brought upon by the loss of shelter, family and social support, and the shortage of water and food, thereby increasing suffering and distress (Pedersen, 2002). Pedersen (1996) further suggests a link between wars and the health of a population.

### 1.4. Refugees and Mental Health: A Literature Review

The refugee experience can be divided into three phases (Lustig, 2004; George, 2012):

1) Pre-migration: conditions before the forced displacement
2) Migration: the flight to safety, corresponds to life outside of the country of origin (e.g.: refugee camp)
3) Post-migration: repatriation, integration into the host country, or arrival in a third host country (resettlement)

Studies suggest that the environmental conditions post-trauma affect refugees and IDPs more than the traumas that resulted in displacement, putting a higher emphasis on migration traumas and daily life hassles such as lack of education and safety (Baron, Jensen, & Jong, 2003).

Women in refugee camps face a vast array of adverse conditions, ranging from sexual assault, abuse, and rape that could lead to the deterioration of their mental health and the onset of psychological problems (Morof et al., 2014); adding to the pre-migration and migration trauma experienced. Moreover, women are at greater risk of stress in camps due to sexual and gender based violence (SGBV) perpetrated by both men in and outside of camps (Baron, Jensen, & Jong, 2003); in a study among Congolese refugee women in Rwanda, close to half of the participants had experienced a form of violence (physical, emotional or sexual) during the conflict, with 22% of the women reporting lifetime intimate partner violence (IPV) (Sipsma et al., 2015). Sipsma and colleagues (2015) further found that women

with high IPV were more likely (4.7 times) to develop poor mental health, similarly, but at lower rates, women who experienced high violence during and after the conflict were 2.7 times more likely while women who experienced violence during the conflict were 2.3 times more likely. Furthermore, a study conducted among female refugees in Cameroon found that the refugee women were ten times more likely to be assaulted by armed groups than the Cameroon's female population, with approximately 39% of the refugees in the study having been assaulted (Parmar et al., 2012). In the case of protracted refugees and refugees living in camps, the post-migration stage is at a halt as they linger in the migration stage. The accumulation of traumatic and stressful events in these situations, if left untreated, can alter the response to stress of the individuals affected (Schauer & Schauer, 2010).

Additionally, mental health problems persist in the refugee population and occur at higher rates compared to the host country's population even after resettlement as shown by a study by Hollander and colleagues (2011) on refugees having resettled in Sweden; they also found that refugee women purchased more psychotropic drugs than their Swede counterparts as well as the refugee men (Hollander, Bruce, Burstrom, & Ekblad, 2011). A study conducted on refugees in Brisbane found that adverse effects from pre-migration in addition to the post-migration experiences of difficulties resulted in poorer mental health outcomes for resettled Sudanese refugees compared to Australian nationals (Schweitzer et al., 2006). .

Some studies have also shown that religious beliefs as well as social support were contributing factors to the wellbeing of refugees (Tempany, 2009). Other studies suggest a level of resilience among South Sudanese refugees, and coping methods that include stoicism and avoidance. (Goodman, 2004; Papadopoulos, 2007). However, in their study in Rwandan and Burundese camps, De Jong and colleagues (2000) found that between 26% and 74% of the population in the camps could have mental health problems (ranging from mild to major) that could impede their coping strategies requiring them to need psychological support.

#### 1.4.1. Gap in the literature the study is aiming to address

The psychological toll of the refugee situation is not unknown however most of the research done on the matter is primarily focused on refugees that have resettled in western countries where the realities and circumstances, though difficult, differ from that of the migration phase (Schweitzer et al., 2006). Although studies conducted in camps have shown a particularly high prevalence of mental illness such as PTSD, depression and anxiety, especially among women, there is little literature regarding what we know on the state of knowledge of these mental health problems among refugee women residing in African camps (Kim et al., 2007; Morof et al., 2014; Parmar et al., 2012). The migration circumstances and the environment in the refugee camps along with the years lived in the 'temporary' conditions can have negative impacts on refugees, even more so on refugee women (Loescher, 2008). This study aims to recount what we know and what is available regarding PTSD, depression, and anxiety among refugee women residing in African camps.

### 1.5. Research Questions and Objectives

To address the abovementioned aim, this paper will answer the following research question: What is the state of knowledge on posttraumatic stress disorder, depression, and anxiety among refugee women in refugee camps in Africa?

The objectives of the study are to identify:

1. The prevalence of PTSD, anxiety and depression among refugee women in African camps;
2. The services available in regards to addressing mental health problems (more specifically PTSD, depression and anxiety for refugee women) and the usage of said services; and
3. The experiences of refugee women in relation to their mental health and life in refugee camps.

## 1.6. Rationale

With 65.3 million refugees, IDPs, stateless persons and asylum seekers in the world today (UNHCR, 2016c), it is estimated that 86% live in the developing world. Furthermore, with a global average of 17 years in refugee camps it is evident that measures need to be taken to ensure that these refugees who have lost their homes and are hoping to return home find some solace in the otherwise permanent *temporary* shelters (UNHCR, 2014)**.** Africa is home to approximately 18 million people of concern (including refugees, internally displaced persons and asylum seekers) according to the UNHCR, accounting for close to a quarter of the world's displaced population (UNHCR, 2016a; UNHCR, 2016c). Africa has been home to multifaceted conflicts spurring from political, ethnic and territorial divides, often characterized by "psychological warfare' (Pedersen, 2002, p.176). Some are ongoing like in the CAR and the DRC while others oscillate in and out of conflicts (e.g.: Burundi, South Sudan, and Somalia) (UNHCR, 2016c). It is widely known that women face higher burdens in these situations, confronted with sexual and gender based violence, and economic hardship within camps. In fact, studies have shown that women encounter more burdens and have higher instances of mental health problems than men (Loescher, 2008; Kamau et al., 2004; Cardozo, et al., 2004; Gladden, 2013; Araya et al., 2007). Additionally, refugee women seem to have a higher prevalence of PTSD, depression and anxiety compared to refugee men (Kim et al., 2007; Morof et al., 2014; Parmar et al., 2012). This study thus aims to give an account of the experiences of refugee women residing in African camps with mental health, the services available to them and the prevalence of the abovementioned mental disorder within this particular population.

# Chapter 2: Methodology

This chapter will give an overall description of how the study was conducted. Starting with a brief definition of a scoping review, it will detail the methods and tools employed for data search, data selection and extraction.

## 2.1. Step 1: Research Questions and Objectives

The aim of this study was to identify the major trends in the knowledge regarding refugee women in Africa and mental health in the context of their stay in camps. This was achieved by providing answers to the following research question.

*What is the state of knowledge on posttraumatic stress disorder, anxiety and depression among refugee women in Africa?*

The overarching objectives of the study were to identify:

1. The prevalence of PTSD, anxiety and depression among refugee women in African camps;
2. The services available in regards to addressing mental health problems (more specifically PTSD, depression and anxiety for refugee women) and the usage of said services; and
3. The experiences of the refugee women in terms of their mental health and life in refugee camps.

## 2.2. Design: A Scoping Review

### 2.2.1. What is a scoping review?

A scoping review was conducted to address the aforementioned research question. A scoping review, by definition, is a preliminary assessment of the potential size and scope of available research on a given topic. It generally aims to identify the nature and the extent of

research evidence. This is done through thorough search determined by time and scope constraints (Joanna Briggs Institute (JBI), 2015).

### 2.2.2. Why a scoping review?

A scoping review was chosen due to the broad and explorative nature of this study; in effect, scoping reviews are ideal when mapping a complex area. Arksey and O'Malley (2005) suggest that scoping reviews are better conducted to assess the extent of the available material in a given area, and to discern the feasibility of undertaking a systematic review[10]. Other purposes of scoping reviews include summarizing and disseminating findings to stakeholders – such as policy makers and practitioners – and identifying potential gaps in research and the significance of conducting a systematic review. In sum, scoping reviews have two overarching aims, one is to conduct a systematic review after establishing the scope of the literature through a scoping review, whilst the second is to rely on the scoping review itself as a the method for dissemination of research.

### 2.2.3. Methodological approach

For my scoping review, I followed the six-step process as informed by Levac and colleagues' (2010) recommendations made to enhance the initial framework by Arksey and O'Malley (2005), illustrated in table 1 below.

Table 1: Scoping review frameworks

| | Arksey and O'Malley framework (p.22/-23) | Enhancements proposed by Levac, Colquhoun and O'Brien. (p.4-8) |
|---|---|---|
| 1. | Identifying the research question | Clarifying and linking the purpose and research question |
| 2. | Identifying relevant studies | Balancing feasibility with breadth and comprehensiveness of the scoping process |
| 3. | Study selection | Using an iterative team approach to selecting studies and extracting data |

[10] in terms of available literature, existence of previous systematic reviews, and resources needed

| 4. | Charting the data | Incorporating a numerical summary and qualitative thematic analysis |
|---|---|---|
| 5. | Collating, summarizing and reporting the results | Identifying the implications of the study findings for policy, practice or research |
| 6. | Consultation (optional) | Adopting consultation as a required component of scoping study methodology |

The above table (Table 1), taken from the Joanna Briggs Institute's (JBI) reviewers' manual methodology for scoping reviews (2015) shows the enhancements made to the initial Arksey and O'Malley (2005) framework.

## 2.3. Inclusion Criteria

The characteristics sought in the study population (i.e. population), the core concepts such as the phenomena of interest and outcomes, and the geographical location and setting (i.e. context) of the review are delimited below. A protocol created with the help Erica Wright (M.L.I.S)[11], the Health Sciences librarian, can be found in APPENDIX A for reference.

*Population: types of participants*

The population for this study were refugee women residing in refugee camps in Africa, aged 15 and over .Additionally, due to the scarcity of studies solely on female populations, studies with a population of at least 50% women, answering the above mentioned criteria, were included.

*Concept*: Through an initial meeting with Erica Wright (M.L.I.S), a search strategy was formulated using the following main concepts emanating from the research question: (i)Refugee, (ii) Women, and (iii) Mental health.

Table 2: Key concepts and search words

| *Concept 1: Refugee* | *Concept 2: Women* |
|---|---|
| • *Search words: Asylum seekers, refugees* | • *Search Words: Woman/women, female(s), mothers, wives* |

[11] Master of Librarian and Information Science

| | *(wife)* |
|---|---|
| | <u>*Concept 3: Mental Health*</u><br>• *Search words: Anxiety, depression, stress, PTSD, post-traumatic stress disorder, psychosocial stress, mental health* |

*Context*: African refugee camps, women and mental health context**.**

*Types of sources:* Any existing literature (including grey literature) published in English and/or French, published between 2000 and 2016. These publication years were chosen to shed light on the state of the literature concerning refugee women in Africa in the 21st century, in light of the increasing number of refugees (UNHCR, 2016b).

## 2.4. Peer-Reviewed Literature

### 2.4.1. Step 2: Identifying relevant studies: Database search for peer-reviewed literature:

Medline, Embase, PsycInfo, Global Health, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Sociological Abstracts, Published International Literature On Traumatic Stress (PILOTS), and Pubmed were searched for relevant literature after consultation with the university librarian. Due to the interdisciplinary nature of the study objectives, Sociological Abstracts, and Global Health were included. These searches were conducted in February and March 2016. The full detail of the search strategies used for these databases can be found in APPENDICES B to I. Grey literature and bibliography searches were conducted separately and will be outlined in the following sections (24.2 and 2.4.3).

Data search was conducted according to the Boolean Logic and Special Characters with the help of a librarian throughout the process. A librarian verified each database search to ensure that the correct methodology was used. After obtaining an excessive amount of studies (multiple thousands on the OVID databases), African countries search terms were added to limit the amount of studies pooled. Gender and age limits were not added in case

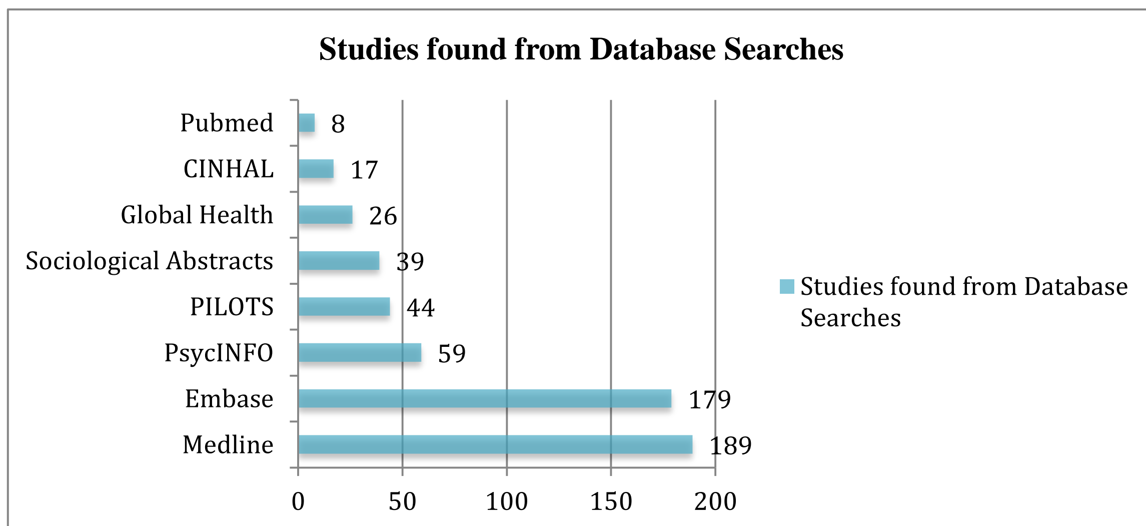
some studies were not coded by age or gender in the databases. Furthermore, Pubmed was searched for the "as supplied by publisher" section to see if there were any studies that were missed when searching Medline. *As supplied by publisher* studies are studies without MeSH terms put directly into Pubmed, meaning that they are out of scope (Pubmed has a 2% difference from Medline). African countries search filters were not used for Pubmed.

The results from Medline, Embase, PsycInfo, CINAHL, Sociological Abstracts, PILOTS, and Global Health were directly pooled into Mendeley, a reference manager, where duplicates were automatically eliminated in February and then later in March. The remaining studies were pooled into Covidence[12] – a web-based systematic review software supported by the Cochrane Collaboration – for screening.

#### 2.4.2. Search results

A total of 561 studies were found through the database searches.

Figure 1: Databases searched and studies found




[12] Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia. Available at www.covidence.org

### 2.4.3. Step 3: Study selection

#### *2.4.3.1. Title and abstract screening*

The results from the database search were exported into Mendeley in two waves: February and March 2016. The first, consisted of all databases excluding Pubmed. The second consisted of the studies found after amending Medline's search and conducting a search on Pubmed. A review was created on Covidence (covidence.org) on February 22nd titled: The state of knowledge on PTSD, depression and anxiety among refugee women in Africa: a scoping review. Two reviewers – myself (AFW) and Jennifer Smith (JS) – screened the title and abstracts of the studies pooled from the database searches; a third reviewer, Dr. Sanni Yaya (SY), was to resolve any conflict that arose between the two reviewers.

As Mendeley had already eliminated duplicates (which were double checked by AFW), 244 studies were imported into Covidence from Mendeley. 32 studies from the amended Medline search were later imported into Covidence (of those 32, 24 were duplicates), thus 8 remained. Then the results from Pubmed were imported into Covidence, of the 8 studies, 1 was found to be a duplicate, 7 were added into the screening.

There were 259 studies for title and abstract screening. With the help of a second reviewer, JS, 35 studies were included into full text screening and there were 31 conflicts. JS and AFW solved 25 of the 31 conflicts, and a third reviewer (SY) solved the remaining 6. At the end of the title and abstract screening, 45 articles were included for full text screening. A list of all 45 studies with their study IDs can be found in APPENDIX J.

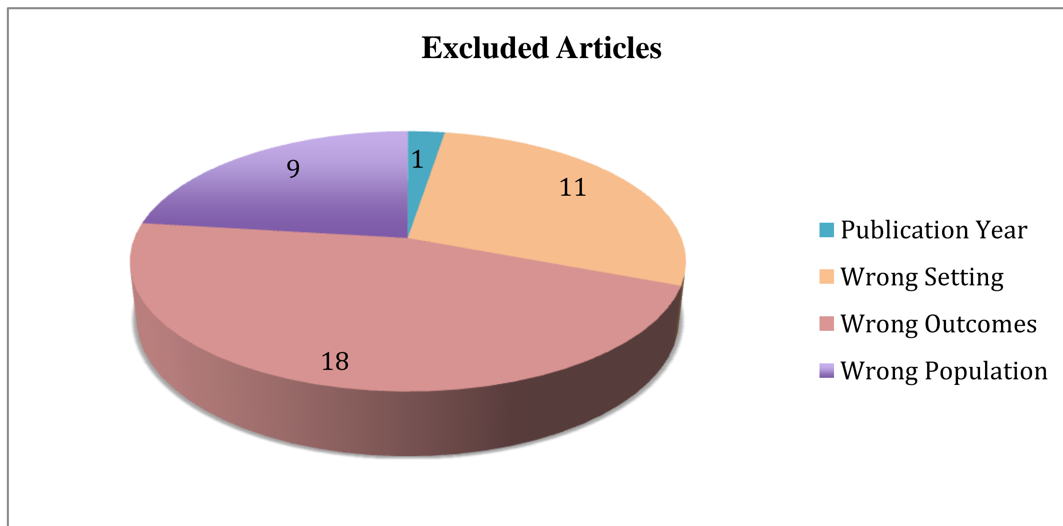
#### *2.4.3.2. Full text screening*

One reviewer (AFW) conducted the full text review for articles pooled through the database search; a second reviewer (JS) and third reviewer (SY) screened studies when the first reviewer was unsure on whether articles met the inclusion criteria or not. SY reviewed 9

articles (146, 9, 188, 86, 193, 7, 162, 191, 226) while JS reviewed 4 (68, 22, 191, 192). At the end of the full text review, 6 articles remained for extraction:

The main reasons for exclusion and the list of studies excluded can be found in the Figure 2 below.

Figure 2: Pie chart of excluded articles by reason of exclusion




The reasons for exclusions:

- *Publication year* (before 2000). 1 article published in 1998 was included in full text by accident, and was later excluded during the review process.
- *Wrong setting*: throughout the full text screening it was found that a lot of studies were set in IDP camps
- *Wrong outcome*: this reason was given when the study was not particularly pertaining to PTSD, depression, and anxiety or to refugee women's experiences (with mental health) in refugee camps.
- *Wrong population*: If a study had a population less than 50% female, or under the age of 15. Studies on IDPs were also excluded.

Although, women over the age of 18 were my primary interest, after some consideration, women aged 15 or older were included. All 214 excluded articles were retroactively reviewed by AFW to ensure that they would not have met this new inclusion criterion

Table 3 below illustrates the process for exclusion of studies.

Table 3:The selection process from the 8 databases searched

| Database | Total articles identified | # of Duplicates removed | # excluded by title and abstract review | # excluded by relevance criteria | Total selected for Charting |
|---|---|---|---|---|---|
| Medline | 189 | - | - | - | 3 |
| Embase | 179 | - | - | - | [13]- |
| PsycInfo | 59 | - | - | - | [14]- |
| PILOTS | 44 | - | - | - | 2 |
| Sociological Abstracts | 39 | - | - | - | 1 |
| Global Health | 26 | - | - | - | [15]- |
| CINAHL | 17 | - | - | - | 0 |
| Pubmed | 8 | - | - | - | 0 |
| Total | 561 | 302 | 214 | 39 | 6 |

## 2.5. Grey Literature

Grey literature is a set of publications such as conference proceedings, reports (from non-governmental organizations (NGOs), international organisations etc.), theses, and government reports that are not published commercially (Grey Literature Database, n.d.). Grey literature was also searched over the course of 1 month in May/June 2016. The following sources were (determined and) searched after meeting with the university librarians (Erica Wright (M.L.I.S.) and Lindsey Sikora (M.L.I.S))

[13] All 3 articles included from Medline were also found in Embase
[14] Ibid. for PsycInfo
[15] 2 of the articles included from Medline were also found in Global Health

### 2.5.1. Step 2: Identifying relevant studies:

Grey literature was collected by searching various sources established with the university librarian. International organisations and agencies who work with refugee women and in refugee camps were searched. Sources such as the UNHCR, the IOM, Médecins Sans Frontières (MSF), Women's Refugee Commission (WRC), and the University of Ottawa (uOttawa) library were searched over the course of a month.

### 2.5.2. Grey literature screening

The grey literature search details can be found in the table below (see Table 4). After consulting with the university librarian and my supervisor, it was decided to screen the first 100 or 200 hits for relevant literature when the grey literature searches generated over 500 results; this was due to time constraints. Therefore, if there was no relevant literature in the first 100 to 200 title and abstract screens, the source was discarded. This occurred twice: with the United Nations (UN) database and the Network Digital Library of Theses and Dissertations (NDLTD).

### 2.5.3. Step 3: Study selection

As noted in Table 4, the grey literature search generated at least 6147 results. Following title and abstract screening and later full text screening, one thesis (obtained through Open Access Theses and Dissertations (OATD), two reports (one from the WHO and the other from the UNHCR), and one journal article (obtained through Google scholar) were included in the review. A list of included studies and their sources can be found in Table 5.

Table 4: List of grey literature sources searched, search methods and results

| Sources | Search terms | Results | Included | Date searched |
|---|---|---|---|---|
| **UNHCR** | Keywords: Refugee Women, Africa; Filter: Mental Health | 16 | 1 | 11/06/2016 |
| **UN (UN.org)** | With all the words: Refugee Women, Mental Health | 3413 | 0[16] | 29/06/2016 |
| **WHO** | WHO Africa Website: Refugee women, mental health | 47 | 1 | 23/06/2016 |
| | sujet: réfugiés, après 2000 | 36 | 0 | 24/06/2016 |
| | • AFRO Lib search:“Refugee Women” AND “Mental health” | 0 | | |
| | Refugee AND Women | 2 | | |
| | • AIM Database search: refugee women | | | |
| | • WHO IRIS: Subject (MeSH) Refugee + Women Health | 9 | | |
| **MSF** | Refugee women, mental health | 45 | 0 | 24/06/2016 |
| **Red cross** | Refugee women, mental health | 0 | 0 | 25/06/2-16 |
| **World Bank** | By topic: Mental Health | 22 | 0 | 28/06/2016 |
| **Greylit.org** | Refugee women | 9 | 0 | 16/06/2016 |
| | Refugee women and mentall health | 1 | | |
| **eThOS** | Refugee Women, Africa | 7 | 0 | 16/06/2016 |
| **Trip Database** | (Refugee women)(Mental Health) (Africa) | 68 | 0 | 16/06/2016 |
| **NDLTD** | Refugee women & mental health<br>2000-2016<br>FR-ENG-ESP<br>Health, Mental, Women, Social Psychology, Studies, Depression, Research, Gender, Psychosocial | 933 | 0 [17] | 16/06/2016 |
| **OATD** | Refugee AND Women AND “Mental Health”<br>→ All fields<br>2000-2016 | 269 | 1 | 16/06/2016 |
| **Women’s Refugee Commission** | Refugee Women, Mental Health | 0 | 0 | 23/06/2016 |

[16] nothing interesting in first 100 results so dismissed
[17] Looked at first 300 articles and nothing relevant so I stopped there

| | | | | |
|---|---|---|---|---|
| **IOM** | "Refugee Women" AND "Mental Health" AND "Africa: | 3 | 0 | 23/06/2016 |
| | "Refugee Women" AND "Mental Health" | 12 | | |
| **CDC & Prevention** | Refugee women AND mental health | 0 | 0 | 25/06/2016 |
| **CAB e-direct** | "Refugee" AND 'Women" AND ("depression" OR "anxiety") AND Africa | 7 | 0 | 28/06/2016 |
| **APA database** | Refugee women AND Mental Health | 154[18] | 0 | 28/06/2016 |
| **OECD i-Library** | Refugee AND Women AND Mental Health | 0 | 0 | 28/06/2016 |
| **Recherche uO** | Title: Refugee Women | 5 | 0 | 28/06/2016 |
| **Search + (uOttawa Library)** | Title: Refugee; Title: Women; Keyword: mental health Date: 2000-present | 195 | 0 | 28/06/2016 |
| | After controlling for subjects: Mental Health; Women Refugees; Women; Refugees | 22 | | |
| **PROQUEST dissertations and theses global** | ti(refugee) AND ti(women) AND (Mental Health) 01/01/2000 - 31/12/2016 | 78 | 0 | 30/06/2016 |
| **African Union** | Refugee (in title); Women (in title); Mental health (in full text) | 0 | 0 | 30/06/2016 |
| | Refugee (in full text); Women (in full text) | [19] | | |
| **Google Scholar** | "Refugee Women" AND "Depression" AND "PTSD" AND "Anxiety" AND "Refugee camps" | 574 | 1 | 26/06/2016 |
| **GreyNet International*** | NA | NA | NA | 16/06/2016 |
| **Total** | | 6174 | 4 | |

[18] Additional 251 results from: PsycARTICLES: 6; PsycBOOKs: 1; PsycEXTRA: 12; PsycCRITIQUES: 1; and PsycINFO: 238

[19] Too many articles that just mention refugees and women in passing

* Source dismissed as payment was required to access the database

## 2.6. Bibliography Search:

Bibliography search consists of looking through studies' bibliographies (included or full text) to identify studies that can be relevant to the review. This was done in two waves.

1. Relevant articles were identified from the bibliographies of the articles (from main databases) at the full text review stage;
2. Relevant articles were identified from included grey literature bibliographies.

### 2.6.1. Step 2: Bibliography search

A total of 16 potential sources were found through the bibliography search of the 45 studies in full text screening. And a total of 2 articles was found through the bibliography search of included grey literature search.

### 2.6.2. Step 3: Study selection

2 studies were included from the bibliography search:

1. Pavlish, 2005 [from Gladden, 2012 (OATD)]
2. Physicians for Human Rights, 2009 [from Voelker, 2009 (Embase and Medline)]

## 2.7. Included Studies

Figure 3: PRISMA Flow Diagram

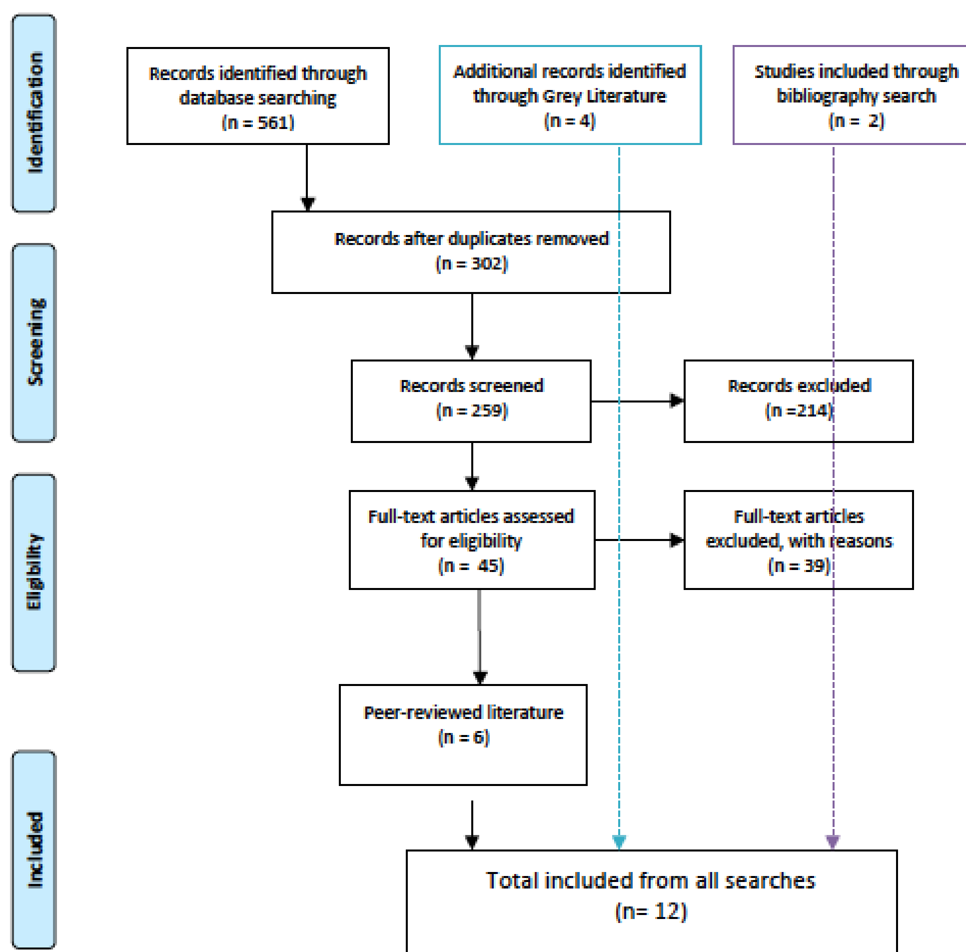



Table 5: List of included studies and their sources

| Included Study ID | Source |
| --- | --- |
| Akinyemi, 2016 | Sociological Abstracts |
| Bell, 2016 | PsycINFO, Medline, Embase & Global Health |
| Carta, 2013 | PsycINFO, Medline, Embase & Global Health |
| Feyera, 2015 | PsycINFO, Medline & Embase |
| Gladden, 2012 | Grey Literature (OATD) |
| Kamau, 2004 | PILOTS |
| Kinfu, 2013 | Grey literature (Google Scholar) |
| Onyut, 2009 | PILOTS |
| Pavlish, 2005 | (Reference search) |
| Physicians for Human Rights, 2009 | (Reference search) |
| UNHCR, 2013 | Grey Literature (UNHCR) |
| WHO, 2014 | Grey Literature (WHO) |

## 2.8. Step 4: Charting The Data: Data Extraction

The data from the included studies were charted to draw the relevant information and lead data extraction; (i)Author, (ii)Year of publication, (iii)Type of study, (iv)Population and participants (v)Research question and methodology, (vi)Findings, and (vii)Conclusions and recommendations (when applicable) were noted. When available, time spent in the camps, age, SGBV as well as other factors associated with poor mental health outcomes were also recorded.

## 2.9. Step 5: Collating, Summarizing, and Reporting the Results

This step consisted of collating, summarizing, and reporting the results (which will be presented in Chapter 3, then discussed in Chapter 4). During the extraction, a number of questions were applied to identify themes in alignment with the research objectives.

(1) What is the prevalence of CMD (PTSD, depression, and/or anxiety)?
   a. Are there any factors/determinants that seem to have an impact on mental health? (e.g.: SGBV, trauma, SES etc.)
   b. What are the tools used to assess prevalence?

(2) What are the psychosocial support services available in the refugee camps, if any? (Mental health clinic, psychiatrists, community outreach, safe space etc.)
   a. Are the refugee women aware of said services?
   b. Do they access them? (Why? Why not?)

(3) What are refugee women experiencing in terms of mental health while in the camps?

In sum, this chapter gave an overview of the scoping review process employed, detailing the search strategies, selection of articles and the steps taken to chart the data and present the results. The results will be presented in the following chapter.

# Chapter 3: Results

A brief description of the findings from the 12 included studies is given in this chapter;  the summary of each included study is then presented in charts.

## 3.1. Descriptive Summary of Selected Literature

As mentioned in chapter 2, twelve studies were included; 6 from database searches, 2 from bibliography searches and 4 from grey literature searches. These studies consisted of journal articles from sources such as *Health Care for Women International, Journal of Nursing Scholarship, International Migration and Integration, Clinical Practice And Epidemiology in Mental Health, BMC Psychiatry, Conflict and Health, International Journal of Pharmaceutical and Biological Sciences Fundamentals* and were published between 2004 and 2016. These sources show the multifaceted nature of the research question combining disciplines such as epidemiology, women's health, conflict studies and psychiatry among others. Three of the included literature were reports, from the WHO, UNHCR and Physicians for Human Rights; one was a PhD dissertation. These 12 studies included participants from Rwanda, Somalia, Sudan, Mali, South Sudan, Congo, Liberia, and Sierra Leone residing in camps across Africa (mainly East Africa: Rwanda, Kenya, Ethiopia, Uganda; but also in Chad, Burkina Faso and Nigeria); the results are illustrated in the table below (see Table **6**). It is important to note that only 5 studies with female only participants met the inclusion criteria, the rest had at least 50% of the participants that were female. The participants' ages ranged from 15 to 75.

The primary aims addressed by these studies are understanding the views and perspectives of refugees, the impact of mental health on the use of reproductive health services, ascertaining the impact of stress in people living in refugee camps, identifying the prevalence and determinants of depression among refugees living in a given camp, assessing

factors and determinants of depression, describing refugee women's experiences living in difficult situations, assessing the services available, and their coping strategies. The methods used to address the aforementioned research goals ranged from cross-sectional, cohort studies to mixed methods, and in-depth interviews and Focus Group Discussions (FGDs). (Akinyemi, Owoaje, & Cadmus, 2016; Bell, Lori, Redman, & Seng, 2016; Carta et al., 2013; Feyera, Mihretie, Bedaso, Gedle, & Kumera, 2015; Gladden, 2012; Kamau et al., 2004; Kinfu, Gebremariam, & Tadesse, 2014; Onyut et al., 2009; Pavlish, 2005; Physicians for Human Rights (PHR), 2009; UNHCR, 2013; WHO, 2014).

Table 6: Refugees countries of origin and their host countries

| Countries refugees emanated from | Host countries | Refugee Camp name(s) | Study ID |
|---|---|---|---|
| South Sudan | Ethiopia, Kenya | Kule and Leitchuor camps (in Ethiopia), and Kakuma camp (in Kenya) | *WHO, 2014; Gladden, 2012* |
| Congo | Rwanda | N/A | *Pavlish, 2015; Bell, 2016* |
| Liberia | Nigeria | Oru camp | *Akinyemi, 2016* |
| Sierra Leone | Nigeria | Oru camp | *Akinyemi, 2016* |
| Somalia | Ethiopia, Kenya, Uganda | Melkadida camp (in Ethiopia), Kakuma camp (in Kenya), and Navikale camp (in Uganda) | *Feyera, 2015; Kamau, 2004; Onyut, 2009* |
| Mali (Tuaregs) | Burkina Faso | Soubgandé camp | *Carta, 2013* |
| Eritrea | Ethiopia | Shimelba camp | *Kinfu, 2014* |
| Rwanda | Uganda | Navikale camp | *Onyut, 2009* |
| Sudan | Kenya, Chad | Kakuma camp (in Kenya), and Farchana camp (in Chad) | *Kamau, 2004; PHR, 2009* |
| Others (Ethiopia, Burundi, Uganda, DRC, Rwanda etc.) | Kenya | Kakuma camp | *Kamau, 2004* |

## 3.2. Tabular Summary of the Literature

In this section you will find twelve tables summarizing the data of the included articles.

<table>
<tr><th colspan="5">Article 1:Trauma- and stressor related disorders in the Tuareg refugees of a camp in Burkina Faso</th></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>Journal</th><th>Study Population and Context</th></tr>
<tr><td>M.G. Carta, R. Wallet Oumar, M.F. Moro, D. Moro, A. Pretu, A/ Mereu, and D. Bhugra</td><td>2013</td><td>PsycINFO, Medline, Embase & Global Health</td><td>Clinical Practice and Epidemiology in Mental Health</td><td>Malian Tuareg refugees residing in Soubgandé camp, Burkina Faso. At the time of the study, 2085 refugees aged 18 years and older lived in the camp<br><br>Participants:<br><br>Out of the 417 selected participants 408 remained: 230 women and 179 men. (Note: the discrepancy with the number of participants, while 9 withdrew, the number of participants retained amount to 8 withdrawals)<br><br>Women were slightly younger than the men (mean age: 35.9 versus 38.9)<br><br>79 women and 81 men were over 40 years old</td></tr>
<tr><th colspan="2">Research Question and Methodology</th><th colspan="2">Main Findings</th><th>Conclusion</th></tr>
<tr><td colspan="2">To ascertain the impact of stress in people living in a Malian refugee camp in Burkina Faso (Soubgandé camp)<br><br>→ Tools:<br><br>1. Short Screening Scale for DSM-IV Posttraumatic Stress Disorder<br>2. K6 Screening Scale (to check for the presence of severe mental distress)<br>Data was collected between August and October 2012.<br><br>Type of Study: Cross-sectional</td><td colspan="2">• Older women more likely to score positive for PTSD-related disorders compared to younger ones (Short Screening Scale for DSM-IV).<br>• Women and participants older than 40 years old were less likely to score positive on the K6 scale than males<br>86.1 % of the women were thought to have PTSD related disorders, while 57,8% score positive on the K6 scale (versus 66.9 % for the males)<br><br>• No difference by age or sex regarding positive score on both the PTSD Short screening scale and the K6 scale.<br>• 61,8% (252 participants) scored positive on both scales</td><td>Adult and elderly women were at higher risk for PTSD symptoms, but did not actually meet criteria for severe mental illness on the K6 scale.61,8% of the participants met the screening criteria for PTSD (not significantly different by age or sex)<br><br>People having experienced the death of a family member and poor housing were more likely to score positive for Trauma- and Stress or Related Disorders.<br><br>The physical environment seems to have an impact on the mental health of the refugees (poor housing). The prevalence of PTSD found in this study was higher than in other studies.</td></tr>
</table>

**Article 2**:Prevalence of depression and associated factors among Somali refugee at Melkadida camp, Southeast Ethiopia: a cross-sectional study

| Author | Year | Database | Journal | Study Population and Context |
|---|---|---|---|---|
| Fetuma Feyera, Getnet Mihretie, Mr. Asres Bedaso, Dereje Gedle, and Gemechu Kumera | 2015 | PsycINFO, Medline, & Embase | BMC Psychiatry | *Setting:* Melkadida camp, South East Ethiopia; Estimated population of 43,380 at the time of the study, all were Somali<br>*Participants:*<br>847 participants (adults): 16 excluded due to incomplete interviews<br>→ 831 participants (median age of 33 with 74.6% between the ages of 18-40)<br>53.9% women<br>55.6 currently married<br>43.6% had never attended school<br>72.3% were unemployed during the time of the study |

| Research Question and Methodology | Main Findings | Conclusion |
|---|---|---|
| **Aims:** Identify the prevalence and determinants of depression among refugees in Melkadida camp.<br>→*Tools*:Community based cross-sectional survey design<br>1. Patient Health Questionnaire (PHQ-9) as an outcome measure of depression (instrument was validated in Ethiopia)<br>2. Harvard Trauma Questionnaire (HTQ) to measure exposure to traumatic events<br>**Type of Study**: Cross-sectional | • Women reported higher traumatic events than the men<br>• Women reported higher rates of exposure to individual trauma than men<br>• Women also twice as likely than men to exhibit symptoms of depression<br>• Overall prevalence of depression was 38.3 %<br>Higher prevalence rates among women | Being female, lack of shelter, divorced and witnessing the murder of a family member, multiple displacements and multiple exposures to traumatic events (8 or more) were determinants of depression among refugees. Somali women were more likely to suffer adverse mental health consequences as a result of migration stressors. This could be explained by fewer opportunities for education and employment, risk of domestic violence, negative attitudes towards them as well as hormonal changes taking place during menstruation |

<table>
<tr><th colspan="5">Article 3:Magnitude of maternal depression and associated factors in Shimelba refugee camp, northern Ethiopia, 2014</th></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>Journal</th><th>Study Population and Context</th></tr>
<tr><td>Kibat Kinfu, Yemane Gebremariam, and Kidane Tadesse</td><td>2014</td><td>Google Scholar</td><td>International Journal of Pharmaceutical and Biological Sciences Fundamentals</td><td>Setting: Shimelba refugee camp, located in the Tigray region (northern Ethiopia). Established in 2004 in response to the Ethio-Eritrean border conflict. In 2014, it was home to 5935 Eritrean refugees, with 1164 refugee women of reproductive age (15-49 years old)<br><br>The camp has one health centre<br><br>Participants: n=418</td></tr>
<tr><th colspan="2">Research Question and Methodology</th><th colspan="2">Main Findings</th><th>Conclusion</th></tr>
<tr><td colspan="2">Aims: assess the factors and determinants of depression among refugee women in Shimelba<br><br>N.B.: maternal depression includes postpartum depression.<br>→Tools:<br>• General health questionnaire (GHQ)<br>Conducted between January 27th and March 7th, 2014<br><br>Type of Study: Cross-sectional</td><td colspan="2">n=418, of those 44% had depression<br><br>Mean age: 29.54 (SD 9.14)<br><br>56.7% were married, 12.7% divorced, 3.6 % widowed and 27% single<br><br>27.3% were illiterate with 25.4% having reached secondary school<br><br>32.5% had lost a family member during their stay in the camp<br><br>44.3 were mothers and 12.2% were pregnant at the time of the study<br><br>46% have encountered violence in the camps (of those, 47% were victims of sexual violence, 22% emotional violence and 31% physical violence)<br><br>62% income from UNHCR</td><td>Nuclear family type were 50.5% less likely to have maternal depression, while women who have suffered at least 1 spousal abuse were 3.5 times more likely to be depressed.<br><br>Other factors such as trauma, physical exercise, marital status, and lack of social support were also significantly associated with depression</td></tr>
</table>

<table>
<tr><td colspan="5">Article 4: Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement – an epidemiological study</td></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>Journal</th><th>Study Population and Context</th></tr>
<tr><td>Lamaro P Onyut, Frank Neuner, Verena Ertl, Elisabeth Schauer, Michael Odenwald, and Thomas Elbert</td><td>2009</td><td>PILOTS</td><td>Conflict and Health</td><td>Setting:<br>Navikale refugee settlement in Uganda, one of 8 official refugee camps within the country; located in South Western Uganda. Established in 1952.<br>Presently home to 14,400 refugee (12,000 Rwandese (Hutus) and ~ 500 Somalis).<br>Most of the inhabitants of the camps have been there since the 90s (91-92 for Somalis and 94 for Rwandese)</td></tr>
<tr><th colspan="2">Research Question and Methodology</th><th colspan="2">Main Findings</th><th>Conclusion</th></tr>
<tr><td colspan="2">Aims:<br>a. Socio-demographic assessment (education, nutrition, SES and physical health status)<br>b. Assess prevalence of mental disorders assoc. w/ exposure to stressful and traumatic armed conflict situations (esp. PTSD and depression)<br>c. Types, description and numbers of extremely stressful and traumatic events exposed to<br><br>→Tools:<br>2. Socio demographic interview<br>3. Event checklist<br>4. Assisted self report<br>5. Validation interview<br>Type of Study: Cross-sectional</td><td colspan="2">Rwandese women had least number of Lifetime Traumatic Events (LTE), lowest prevalence of PTSD as well as the lowest PDS sum score<br><br>Somali women were highly traumatised (had as many LTE as Somali men and as high a PDS score). Somali women scored higher than Rwandese women<br><br>Somali women had spent more years in camps and had larger households and less to eat<br><br>Rwandese men suffered more than the men.<br><br>Somali women reported highest number of sexually violent events<br><br>(Obj. 2 Mental health support negligible in refugee camp)</td><td>PTSD prevalence did not different between genders for the Somali refugees, with 48.1% prevalence; Rwandese women had a lower prevalence than the Rwandese men (38.9% vs. 27.3%). In total, the men in the camps had a higher prevalence of PTSD than the women.</td></tr>
</table>

<table>
<tr><th colspan="5">Article 5: Psychiatric disorders in an African refugee camp</th></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>Journal</th><th>Study Population and Context</th></tr>
<tr><td>Michael Kamau, Derrick Silove, Zachary Steel, Ronald Catanzaro, Catherine Bateman, and Solvig Ekbald</td><td>2004</td><td>PILOTS</td><td>Intervention</td><td>Setting:<br>Community mental health service established in 1997 in Kakuma refugee camp, Northwest Kenya. The camp population increased by 50% (60,000 to 90,000) from 1997-99.<br><br>Refugees in camps were survivors of organized violence and civil war, having fled genocide, clan fighting, revenge killing and abuse<br><br>Participants: 60% Somali, 31% Sudanese, 9% others<br><br>53% females<br><br>The study population (n=1852) over the course of 3 years, annually representing just a little under 1% of the camp population</td></tr>
<tr><th colspan="2">Research Question and Methodology</th><th colspan="2">Main Findings</th><th>Conclusion</th></tr>
<tr><td colspan="2">Aims:<br><br>Assess prevalence of psychiatric disorders among the clients of a community mental health service<br><br>Method:<br><br>A psychiatric nurse maintained a logbook of the DMS IV based diagnoses<br><br>Type of Study: Cohort</td><td colspan="2">Patients with PTSD comprised 38.6% of those that visited; anxiety: 22.7 %; and depression: 10.6%<br><br>12,3% of patients had psychosis (schizophrenia and bipolar disorders), which was 1.7 more prevalent among males. PTSD was diagnosed in almost twice as many female than males<br><br>Follow-up consultations for PTSD were lower for PTSD than other disorders (schizophrenia, epilepsy and depression), these results could be due to referrals made to NGOs for PTSD patients</td><td>Mental health assistance is primordial in refugee camps where most times, indigenous practices have been disrupted. It is also important to look at treatment-seeking behaviour, as it is most likely that these numbers are an underestimation (severity, disability, social support and stigma can be influencing factors worth considering). One nurse made the diagnoses; hence inter-rater reliability was not established.</td></tr>
</table>

**Article 6**: Understanding the effects of mental health on reproductive health service use: a mixed methods approach

| Author | Year | Database | Journal | Study Population and Context |
|---|---|---|---|---|
| Sue Ann Bell, Jody Lori, Richard Redman, and Julia Seng | 2016 | PILOTS | Intervention | *Setting*:<br>2 refugee camps with 20,000 and 15,000 residents respectively in North-western Rwanda<br>**Participants**: 810 Congolese refugee women living in camps in Rwanda (NW), 405 from each camp<br>15-49 years old |

| Research Question and Methodology | Main Findings | Conclusion |
|---|---|---|
| **Aims:**<br>To see if mental health would infringe on use of reproductive health services<br>*Method*:<br>Key informant interview with quantitative data from the 810 refugee women. Qualitative section executed after collection of quantitative data from the 810 refugee women<br>Aspects of mental health measured using the Self-Report Questionnaire (SRQ-20) to screen for CMD<br>Conflict and post-conflict GBV was also examined<br>**Type of Study**: Mixed-methods | Quantitative:<br>87% reported at least one emotional health symptom<br>42.5% can be considered to be suffering mental distress consistent with a CMD (e.g. depression, anxiety and PTSD)<br>~35% reported GBV<br>~25% lost a child (not due to stillbirth)<br>The mean score for the SRQ-20 increased if women answered yes to suicide items.<br>11% rates of suicidality<br>Mental health services offered by one social worker with limited training on mental health for 35,000 refugees (across two refugee camps). | a. Social and economic realities<br>Not permitted to work outside of camp<br>b. Lack of agency<br>Sex work is common due to social and economic realities, stunting agency, many choose to leave the camps to get work and return only when needed (health care etc)<br>c. Mental health care<br>Mental health care is provided by one social worker with limited training in mental health care for 35,000 refugees!<br>d. Services |

<table>
<tr><th colspan="5">Article 7: In their own words: mental health and quality of life in West African refugees in Nigeria</th></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>Journal</th><th>Context</th></tr>
<tr><td>O. O. Akinyemi, E. T. Owoaje, and E. O. Cadmus</td><td>2016</td><td>Sociological Abstracts</td><td>International Migration and Integration</td><td>Setting: Oru refugee camp located in Ogun State, South Western Nigeria. Only refugee camp in Nigeria, established in 1990 in response to Liberian Civil War (1989). At the time of the study there were 5000 refugees living in the camp. Large majority were form Liberia (over 80%), others were from countries such as Sierra Leone, Sudan, Congo, and Eritrea. One functional mini clinic in the camp<br><br>Participants: 32 Male and female refugee 18 years old (yo) and older who had resided in the camp for at least 1 year. 16 women and 12 men (68.8% Liberians and 31.2% Sierra Leonean)<br><br>Age range: from 18 to 67. Mean age for female: 38.5; for male: 41.9; overall: 40.2</td></tr>
</table>

<table>
<tr><th>Research Question and Methodology</th><th>Main Findings</th><th>Conclusion</th></tr>
<tr><td>Aims:<br><br>Assess prevalence of psychiatric disorders among the clients of a community mental health service<br><br>Method:<br><br>4 Focus Group Discussions (FGDs)<br><br>1 FGD with 8 women under 40 years old (yo)<br><br>1 FGD with 8 men under 40 yo<br><br>1 FGD with 8 women 40 yo and older<br><br>1 FGD with 8 men 40 yo and older</td><td>Mental health as an integral part of health<br><br>Quality of life as important to mental health, and similarly if mental health is poor, quality of life is affected. Most believed that women were more predisposed to adverse mental health.<br><br>Women and young girls turned to prostitution as few employment prospects were available.<br><br>High hope is placed on education.<br><br>Women expressed that poor housing, insufficient food and opportunities took a toll on their mental health</td><td>Factors associated with mental health are:<br><br>1. Poverty/Unemployment<br>Poverty and unemployment diminish mental health and drive young girls into prostitution, depression etc.<br><br>2. Physical Health<br>Link between physical and mental health<br><br>3. Lack of family support/family problems and abuse suffered in the refugee camp<br>Loss of significant other makes for single mothers<br><br>4. Religious/Spiritual factors<br>Very important for maintaining mental health.<br><br>5. Environment<br>Type of housing also has an impact on Quality of Life<br><br>6. Discrimination<br>Social Vices</td></tr>
</table>

<table>
<tr><th colspan="5">**Article 8**: Action responses of Congolese refugee women</th></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>Journal</th><th>Study Population and Context</th></tr>
<tr><td>Carol Pavlish</td><td>2005</td><td>Reference search</td><td>Journal of Nursing Scholarship</td><td>*Setting*:<br>Refugee camp in Rwanda, home to ~ 12,000 refugees from DRC<br><br>**Participants**: 14 Congolese refugee women out of 15 selected refugees. One participant cried frantically so was excluded<br><br>18-50 years in age</td></tr>
<tr><th colspan="4">Research Question and Methodology</th><th>Main Findings & Conclusions</th></tr>
<tr><td colspan="4">**Aims:**<br><br>To describe Congolese refugee women’s action response to difficult living situations<br><br>*Action response is defined as activities performed in response to specific stimuli, such as the difficult circumstances the women described in their narrations.*<br><br>*Method*:<br><br>Interpretive qualitative; Narrative Data collection<br><br>How agency relates to psychological well being</td><td>Loss, sorrow, grief are mentioned, living conditions as well taking back their lives is touched upon. Women talked about hopelessness and sadness that they felt as a result of their condition. They seem to be aware of the importance of psychological well being for functioning. A recurring theme is faith and how spirituality helps overcome some of the adverse feelings.</td></tr>
</table>

<table>
<tr><th colspan="3">Report 1: Nowhere to turn: Failure to protect, support and assure justice for Darfuri women</th></tr>
<tr><th>Author (by) and Year</th><th colspan="2">Study Population and Context</th></tr>
<tr><td>Physicians for Human Rights (PHR) in partnership with Harvard Humanitarian Initiative<br><br>2009</td><td colspan="2">Setting: Farchana Camp in Eastern Chad. The camp was established in January 2004 to house 2000 Darfuri refugees; in 2008 the population of Farchana was 20,650 (5,643 families). Women and children account for 60% of the population. <u>3 doctors</u> to care for 20,000 refugees in November 2008.<br>Participants: 88 women in the Farchana camp; Age: mean 35; median: 30, range: 18-75<br><br>43% did not have a husband living with them in the camp</td></tr>
<tr><th>Research Question and Methodology</th><th>Main Findings</th><th>Conclusion</th></tr>
<tr><td>Tools: Istanbul protocol (IP)<br><br>2 components:<br>1. A survey (qualitative and quantitative questions on women’s experiences in Darfur and in camps in Chad<br>2. Medical evaluation (Physical and psychological evaluation of 21 of the women who had reported physical or sexual assault)</td><td>Obj. 1: 21 women received a medical evaluation. All experienced one or more of the following: Major depressive disorder (MDD); Depressive disorders not otherwise specified (DD-NOS); PTSD or some PTSD like symptoms.<br>Obj. 2: The psychosocial services varied across the 6 refugee camps that the physicians visited in Chad. Some camps had international psychiatrists prescribe anti-depressants and anti-anxiety medication (but not necessarily concurrent psychotherapy); In other camps no psychotropic were available. Some camps provide space for women to sow, weave baskets etc.; and in other camps, refugees were recruited as mobilizers (trained with basic concepts) to identify and refer refugees to NGOs. Some NGOs have SGBV aids. And again in other camps, refugees are trained in MH concepts and refugees with problems are encouraged to speak with them. Several camps have sensibilizations for stress, non-violent conflict resolution SGB and domestic violence. Other camps educate the block chiefs in hopes that they disseminate the knowledge.<br>Obj. 3: <u>Deterioration of physical and mental health</u>, with mental health plummeting (self-reported on a Likert scale); IP evaluations showed that women suffered from multiple acute and chronic physical symptoms and disabilities. <u>Lack of comfort</u> using the mental health services. <u>Shame</u> ensuing from rape prevented women to talk about it as well. Women who had reported rape (probable or confirmed) were 3 times more likely to report <u>suicidal thoughts.</u><br><u>Social Stigma/Physical Repercussions.</u> More with confirmed rapes were 6 times more likely to be <u>divorced or separated</u><br><u>Rejection and physical violence by family</u> members. <u>Food insecurity</u> was a recurring theme. There was also a general feeling of hopelessness regarding camp conditions.</td><td>Recommendations:<br><br>1. Prevention and protection<br>The women felt that their situation forced them to leave campgrounds, ensuing in SGBV. Prevention and protection is thus an important factor in curbing the ailments that the women face<br><br>2. Justice and accountability<br>They are also afraid to come forward to the authority as nothing is being done; they are ashamed. Some of the women face repercussions from their family members.<br><br>3. Support to survivors<br>The support services available in refugee camps are inconsistent, across the different camps. Women are not comfortable accessing them. Their main concerns lie with food security, shelter and protection, and those should be addressed.</td></tr>
</table>

<table>
<tr><th colspan="2">Report 2: WHO Mental Health Report on Refugee Camps in Gambella Region. 10 – 17 May 2014, Gambella, Ethiopia</th></tr>
<tr><th colspan="2">Study Population and Context</th></tr>
<tr><td colspan="2">Setting: Gambella, West of Ethiopia. Mental health care in the region is practically non-existent. One psychiatric nurse provides care at Gambella Hospital (outside of the camps). 4 refugee camps in Gambella sheltering South Sudanese refugees, this report is focused on two: Kule and Lietchuor camps</td></tr>
<tr><th>Main Findings</th><th>Conclusion</th></tr>
<tr><td>Kule camps:<br>May 2014: 44,480 refugees, one clinic run by ARRA, with 3 outpatient departments (one adult and 2 under 5), an observation room and a pharmacy. Referrals available to Itang Health Centre and Gambella Hospital. 58 health professionals (including on MD, 2 Health Officers, 4 midwives and 31 health community workers from the refugee community); <u>none of which have received training dedicated to mental health</u> (mental health cases are referred to Gambella Hospital). Psychotropic medications are not available<br><u>SGBV seems prevalent</u>, rape cases reported but post exposure prophylaxis is not available, STI are very common. Population keeps increasing warranting the need for a second camp (Kule 2) to accommodate arrivals (check UNHCR to see current population!)<br>Lietchuor Camp:<br>It is the newest camp with the capacity to shelter 20,000 people; but 48,000 are registered.<br>Only health facility directly serving camp is the MSF hospital with 2 inpatient departments, 1 outpatient, one ICU, 3 units dedicated to malnourished children, two isolation units (TB and measles) and one dispensary. Patients are mainly children. 57 health professionals (2 MD, 10 health officers, and 45 general nurses). Referrals to Nyinenyang Health centre and mainly the Gambella Hospital. No one is specifically trained in mental health and psychotropic medications are not available. There seems to be an extremely low detection rate of patients suffering from mental disorders, including epilepsy<br>About the referral centres:<br><u>Gambella Hospital:</u><br>One psychiatric nurse is deployed at Gambella Hospital (and was on training at the time of this report)<br>Psychotropic medications are available at the pharmacy of the hospital<br>Few referrals are made from the camps to Gambella hospital for mental health conditions → severe under-detection of mental disorders is suspected.<br>Services for mental disorders (including epilepsy) are not available at health centre, all patients with mental, neurological and substance use disorders are referred to Gambella Hospital.<br><u>Nyinenyang Health Centre</u>:<br>19 health professionals (13 general nurses, 2 psychiatric nurses, 4 lab technicians)<br>Two psychotropic medications are available at this facility (Chlorpromazine for psychosis and phenobarbitone for epilepsy). No patients with MNS disorders are seen at the clinic.</td>
<td>Mental health is a priority for intervention.<br><br>SGBV is a contributing factor to increased rates of mental disorders<br><br>Lack of appropriate training and supervision in mental health, stigma and discrimination attached to people suffering from mental disorders, congestion of PHC facilities in camps, lack of awareness etc.<br><br>In the two camps in the report, community mental health services are non-existent and communities are not accessing any form of mental health care.<br><br>Little to no awareness in terms of mental health in the area.<br><br><u>Recommendation:</u><br>- Activities that are crucial for the development of mental health services include the following:<br>- Allocating funding to mental health services, incorporating it in the emergency response. Raising awareness on mental disorders and availability of care, giving a role to health extension workers and community based workers from the refugee population (capacity building and establishing partnerships). Making<br>- Psychotropic medications available.<br>- Community based mental health<br>- Distribution of guidelines and training materials</td></tr>
</table>

<table>
<tr><th colspan="4">Report 3: UNHCR's Mental Health and Psychosocial Support for Persons of Concern</th></tr>
<tr><th>Author</th><th>Year</th><th>Main Findings</th><th>Conclusions</th></tr>
<tr><td>UNHCR</td><td>2013</td><td rowspan="3">To a varying degree these countries had limited MHPSS services within their refugee camps, Kenya and Tanzania faring higher than most countries while Ethiopia, Sudan and South Sudan had little to no MHPSS services.<br><br>Other services that were mapped included SGBV support.<br><br>Psychological Interventions included:<br><br>1.Basic counselling for individuals, including psychological first aid; 2.basic counselling for groups and families; 3.support groups with people with similar problems; 4.interventions for alcohol/substance abuse problems; 5.psychotherapy; 6.individual or group psychological debriefing; 7.art therapy groups including theatre, dance, and music), Kenya had all, while Tanzania lacked 6; Chad, 3 and 5; South Sudan 4,5,6, and 7; Sudan 2,3,5,6, and 7; and lastly Ethiopia lacked all.</td><td rowspan="3">Psychosocial training for staff involved in refugee status interviews, psychosocial and mental health orientations/training for legal protection workers; psychological interventions (art therapy), mental health services in the existing primary health care system, specialised mental health care (non-pharmacological management of mental disorders by specialized mental health care providers and inpatient mental health care) were among activities less represented in survey responses.<br><br><u>Recommendations:</u> role of the UNHCR relating to MHPSS should be clear, and include implementation and support of MHPSS, and capacity building should be enhanced among others.</td></tr>
<tr><th colspan="2">Methodology</th></tr>
<tr><td colspan="2">Service mapping of the services available (section 3.1. of the report)<br><br>African countries surveyed include: Chad, Ethiopia, Kenya, South Sudan, Sudan, and Tanzania (6 out of the 11 countries).<br><br>Mapping done based on the following services:<br><br>• Psychological interventions:<br>Mental Health services in the existing PHC system<br><br>Specialized mental health care<br><br>• Psychological interventions:<br>Mental health services in PHC system and specialized mental health care (non pharmacological management of mental disorders by specialized mental health care providers and inpatient mental health care) were less represented.</td></tr>
</table>

<table>
<tr><td colspan="5">**Thesis 1**: The coping strategies of Sudanese refugee women in Kakuma Refugee camp, Kenya</td></tr>
<tr><th>Author</th><th>Year</th><th>Database</th><th>School</th><th>Study Population and Context</th></tr>
<tr><td>Jessica Lyn Gladden</td><td>2012</td><td>Grey Literature Search: OATD</td><td>Michigan State University</td><td>*Setting*:<br>Kakuma refugee camp, Kenya<br><br>**Participants**: Sudanese refugee women in Kakuma 18 years old and older. The Sudanese refugee population is one of the largest, making up about one third of the 80,000 refugees in Kakuma. Snowballing recruitment.<br><br>30 interviewees:<br><br>Age range: 18-50 (mainly aged 18 and 19), all were form the Dinka ethnic group</td></tr>
<tr><th colspan="3">Research Question and Methodology</th><th colspan="2">Main Findings & Conclusion</th></tr>
<tr><td colspan="3">**Chapter 3**<br><br>**Research Questions:**<br>1. How do Sudanese refugee women living in hosting countries describe their support systems for coping?<br>2. How do the beliefs of Sudanese refugee women living in hosting countries appear to influence coping?<br>3. How does formal support in the camps such as clinics or counselling centres (or lack of these supports) appear to influence the coping of Sudanese refugee women living in hosting countries?<br>*Method*: a qualitative structured interview questionnaire. 19 open ended questions and a collection of demographics questions<br><br>Additional interviews (informal) with camp officials, workers and interpreters took place, as well as field notes.</td><td colspan="2">Lack of social support is reported<br><br>Not having their husbands with them posed an additional burden. Not having parents as difficulty, being orphans not relatives other than dependents<br><br>Feelings of helplessness<br><br>Spirituality: Belief in God to cope with situation (sometimes in the form of support from within the church). God as strength for many, some doubted Him.<br><br>Hope in education (mainly 18-19 year olds)<br><br>UNHCR is utilized for physical needs.<br><br>More emphasis with physical needs<br><br>The women brought up no other forms of emotional support in regards to the UNHCR.<br><br>Lack of awareness: few women had utilized the hospitals and counselling centres available in the camp (n=3)</td></tr>
</table>

The descriptive summary of the studies selected for charting was presented in an attempt to answer the following question: What is the state of knowledge on posttraumatic stress disorder, depression, and anxiety among refugee women in African camps. The findings and the themes that emerged from the close readings of the included studies will be presented. The results will be divided by the aims they answer: first the presence and prevalence of mental disorders and particularly PTSD, depression and anxiety will be outlined from the included studies; second, the services available and their access by refugee women will be discussed; lastly, the experiences of these women with mental health will be presented.

## 3.3. Presence of Mental Disorders

The presence and prevalence of mental health disorders among the included studies were assessed using a variety of tools (see Table 7). PTSD and depression were found at varying degrees across the different refugee populations; and one study even mentions emotional health symptoms and suicide ideation in relation to common mental health disorders (CMDs) (Bell et al., 2016), there were however no information on the prevalence of anxiety.

It is important to note that because most studies included both women and men, it was challenging to extract relevant information that related to women in particular. However, throughout the process of the scoping review mental health problems among refugee women in African camps were made evident across the various included studies.

### 3.3.1. Posttraumatic stress disorder

Posttraumatic stress disorder was present a varying degrees in the included studies. Carta and colleagues (2013) in their study among Tuareg refugees from Mali residing in the Soubgandé camp in Burkina Faso found that, though more women displayed symptoms of PTSD, the disorder was found at similar rates between both genders, with an overall prevalence

of 61,8%. The authors further found that older women were at higher risk for PTSD-related symptoms, though they did not necessarily meet the screening criteria for the disorder. Conversely, Kamau and colleagues (2004) found that PTSD was diagnosed in twice as many females than males, with an overall prevalence of 38.6%, (the diagnoses was effectuated by a psychiatric nurse in the Kakuma camp). Additionally, Onyut and colleagues (2009) found that the rates of PTSD were higher among the men (42.7% vs. 34% for the women). These rates further differed between the Somali and Rwandese refugees, with Somali men and women exhibiting similar rates of PTSD (at 48%) while Rwandese men had a significantly higher prevalence of PTSD (38.9% vs. 27.3% for Rwandese women). This was in part explained through the association between the experience of trauma and the presence of psychological sequelae, in effect Onyut and colleagues (2009) found that Somali women as opposed to the Rwandese women in their study reported more traumatic events and experienced higher instances of mental distress.

#### 3.3.2. Depression:

One of the included studies on the prevalence of maternal depression among Eritrean refugees in Shimelba camp in Northern Ethiopia found that close to half of the participants (44%) suffered from maternal depression (Kinfu, et al., 2014). Another study among Somali refugees in the southeast of Ethiopia found that women were twice as likely to express symptoms of depression compared to the men (Feyera, et al., 2015).

#### 3.3.3. Common mental disorders (CMDs):

As mentioned in chapter 1, anxiety is often times not screened or diagnosed if depression and/or PTSD can better explain the symptoms, (APA, 2013d). As such, little to no included studies touched upon anxiety. One included study however, found that almost half of the

Congolese refugee women exhibiting emotional health symptoms were considered to be suffering from a mental disorder consistent with a CMD (such as anxiety, depression, and PTSD) (Bell et al., 2016). Moreover, in a report undertaken in a Chadian refugee camp for Sudanese (Darfuri) refugees, of the 21 women that received a medical evaluation, all experienced one or more mental disorder consistent with Major Depressive Disorder (MDD), Depressive Disorders-Not Otherwise Specified (DD-NOS), PTSD and/or PTSD symptoms (PHR, 2009).

## 3.4. The Mental Health Services Available Across the Refugee Camps

Studies have identified that refugees have higher rates of psychosocial problems compared to the general population (Kim et al., 2007; Morof et al., 2014; Schweitzer, et al., 2006), moreover mental health is a fundamental aspect of health (WHO, 2010), especially in emergency settings (IASC, 2008). In effect, international guidelines for MHPSS include a range of services from security and basic services to specialized support such as access to psychiatrists and medication (IASC, 2008).

Following the examination of the charting of the data, the main theme that emerged regarding the mental health services across the refugee camps is: The varied services across camps, which is in part related to a lack of qualified personnel.

### 3.4.1. Varied services across camps and countries

Through the scoping review it was found that the mental health and psychosocial services available to refugees (women and men alike) varied significantly across the different camps. In effect, across 6 camps in Chad, the available services ranged from international psychiatrists prescribing anti-depressants and anti-anxiety medication to refugees being trained in mental health concepts, and space for women's leisure (PHR, 2009). In the Gambella region of Ethiopia,

mental health services were sparse. In effect, while health centres were available and over 40 health professionals (including Medical doctors, midwives and community health workers) were present in the refugee camps, no one had received training in mental health, and psychotropic mediation was not available. Furthermore, referrals were made to health centres outside of the camps (to the Gambella Hospital mainly, a hospital in the region), but even those centres lacked adequate mental health infrastructure with only one psychiatric nurse present to assist both the growing refugee population (with over 60,000 refugees between 2 of the 4 camps) and the general Gambella population (WHO, 2014). This is echoed in the 2 refugee camps in Rwanda, where one social worker with limited training on mental health offered mental health services for 35,000 Congolese refugees across two camps (Bell et al., 2016). Onyut and colleagues (2009) go further by saying that the mental health support is negligible in Navikale camp in Uganda, while Feyera and colleagues (2015) mention that community based mental health and psychosocial support services are being implemented in the Melkadida camp in Ethiopia by the International Medical Corps (IMC), with the integration of clinical mental health and psychosocial services within a health clinic. These findings are corroborated by the UNHCR's (2013) MHPSS service mapping activity, which showed the inconsistency of mental health services across refugee camps in 6 African countries: Chad, Ethiopia, Kenya, South Sudan, Sudan, and Tanzania. The Kenyan camps possessed a wide range of psychological interventions, while the Chadian, Sudanese, South Sudanese and Tanzanian camps had limited resources and the Ethiopian camps had none, according to the report (UNHCR, 2013). Kakuma camp in Kenya had a psychiatric nurse in a mental health facility from 1997 to 2003 when Kamau and colleagues (2004) conducted their study; and according to the mapping service (UNHCR, 2013), the camp also has

an integral psychological intervention in place (ranging from basic counselling to art therapy) now.

Some of the included studies suggest a possible lack of awareness and access by these women. One study conducted in Kakuma refugee camp in Kenya noted that less than 1% of the camp's population accessed the service of the psychiatric nurse annually (Kamau, et al., 2004). Similarly, among the 88 refugee women residing in Chad, only a few were aware of the mental health services, and even fewer (3 women out of the 88 participants) accessed them (PHR, 2009).

## 3.5. The Refugee Women's Experiences

Throughout the scoping review, there were four themes that emerged regarding the experiences of refugee women with mental health/psychosocial health: (i)Violence (ii)Losses and family life (iii)Poor quality of life and (iv) Coping mechanisms. These themes are echoed within the barriers in accessing mental as well as the factors contributing to adverse mental health outcomes.

### 3.5.1. Violence

Violence, as defined by the WHO (2004) is:

> The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation. (p.4)

And as such is one of the major themes that emerged in this review. Women expressed suffering from a myriad of violent events like sexual and gender-based violence encompassing rape, spousal abuse including physical abuse as well as witnessing and living through traumatic life events.

Both Somali and Rwandese refugee women in the Navikale camp in Uganda reported sexually violent events, with Somali women reporting higher events (Onyut et al., 2009). Similarly, the women in the study by Feyera and colleagues (2015) reported higher rates of trauma compared to the men and these experiences of trauma were found to be a determinant of depression. In the study conducted in two refugee camps is North Western Rwanda, 35% of the women reported gender based violence (Bell et al., 2016). 46% of the Eritrean women in the study by Kinfu and colleagues (2014) had also encountered violence in the Shimelba camp, of which 47% were instances of sexual violence, 22% emotional violence and 31% physical violence. In her transcultural interpretive qualitative study among 14 Congolese refugee women in Rwanda, Pavlish (2005) relates stories of sexual violence encountered by the women. Likewise, in the report by Physicians for Human Rights (2009) the researchers found that out of the 88 Darfuri women in the study, there were 20 confirmed rapes (17 out the 88 women) and 12 highly probable cases of rapes, with a total of 32 confirmed and highly probable rape cases, 15 having taken place in Chad, the host country (with one women assaulted twice). These events took place when women left the camps to collect firewood. A total of 21 women underwent a medical evaluation as a result of the rape cases and all were found to have one or more mental health disorders (MDD, DD-NOS, PTSD or PTSD like symptoms). These women also faced physical violence from family members as a result of the rapes, with one woman describing being ostracised and treated like an animal, the women also expressed feelings of shame following rapes (PHR, 2009).

### 3.5.2. Family life and losses

Another theme that emerged across the included studies was loss and its impacts on the dynamics of family life. Refugee women related their experiences of loss ranging from family

members and friends to the loss of support and sense of self. Family life encompasses aspects such as marital status, the number of children the women care for and the presence of other family member in camps.

Rejection by family due to rape was found among the women in Farchana camp (PHR, 2009), women with history of rape being six times more likely to be rejected. The women in Gladden 's (2012) study stated that not having their significant other present in the camps constituted an additional burden, similarly not having parents and family members other than dependents presents was described as difficult with women referring to themselves as orphans.

Family type in Kinfu and colleagues (2014) study on maternal depression was associated with depression, in effect women with nuclear family types were 50% less likely to be depressed compared to those with mixed family types. In Feyera and colleagues (2015) study on the prevalence of depression among Somali refugees in Melkadida camp, divorce was positively associated with depression.

Loss of previous life is a recurring theme, with the new life in camps being drastically different than that of their homes (PHR, 2009). Loss of family members, loss of children, and loss of loved one were reported by the women and were associated with adverse mental health outcomes (Bell et al., 2016; Carta et al., 2013; Feyera et al., 2015; Pavlish, 2005; PHR, 2009). Loss of social support was also found to have an impact on the women's psychosocial wellbeing.

#### 3.5.3. Quality of life

The link between socioeconomic factors and mental health has been demonstrated in chapter one (WHO and Calouste Gulbenkian Foundation, 2014). And in congruence with these findings, the experiences of the refugee women with mental health were intrinsically connected to their quality of life, the impacts of education, or lack thereof, poor housing, food scarcity and

low/non existent employments prospects constitute subthemes that were brought up by the women in the included studies. When asked about mental health, their main concerns lied with their quality of life.

Fear and insecurity were discussed; especially fear of leaving campgrounds due to a high prevalence of rape (PHR, 2009). Akinyemi and colleagues (2016) study elucidated the importance of quality of life for refugees in respect to their mental health; first the refugees recognised the important link between mental health and physical health and went further by enumerating the factors associated with mental health such as unemployment, poverty, and their environment (including housing). They found that their mental health deteriorated due to the poor life conditions in the Oru camp in Nigeria. Similarly Bell and colleagues (2016), Pavlish (2005), and Feyera and colleagues (2015) found that socioeconomic realities such as poverty, unemployment, lack of shelter, fewer educational opportunities lack of adequate food water and clothing were associated with poor mental health outcomes for the refugee women. The women in Akinyemi and colleagues' (2016); Pavlish (2005) and the report by PHR (2009) expressed the social vices that ensue from their poor quality of life, with some women turning to prostitution to provide for their families.

#### 3.5.4. Coping mechanisms

Spirituality was found to be a recurring theme in terms of coping among the included studies in the scoping review (Akinyemi et al., 2016; Gladden, 2012; Pavlish, 2005; PHR, 2009). Refugee women used spirituality as a means to cope with being away from home, their status as a refugee, and the hardships they faced and continue to face. God was seen as a source of strength, and the church, a source of support. They expressed that their spirituality helps them overcome some of the adverse feelings brought upon by their condition (Akinyemi et al., 2016;

Gladden, 2012; Pavlish, 2005; PHR, 2009). Moreover, religious and spiritual practices were thought to be important for maintaining mental health by refugees residing in Oru camp, Nigeria (Akinyemi et al., 2016). Another coping method encountered in two studies was education. Hope in education, particularly for younger women, was reported to be a way of coping with life in refugee camps. Education seemed to pose a way of moving forward; portraying hope for the future (Gladden, 2012; Pavlish, 2005).

While some of the women exhibited coping mechanisms, others expressed feelings of hopelessness and despair (Pavlish, 2005). Additionally, Darfur refugee women in Kakuma (Gladden, 2012) and in Farchana camp, Chad (PHR, 2009) expressed feelings of helplessness and hopelessness to describe their mental state.

# Chapter 4: Discussion

This chapter will discuss the findings from this scoping review and how it integrates within the knowledge on mental health among refugee women. This will be followed by the gaps identified in the study design as well as the included studies. This chapter will conclude with an overview of the findings and with future directions for research.

## 4.1. Mental Health Discourse

The findings from this scoping review are echoed across various studies with refugees in post-migration. Indeed, according to a study by Robertson and colleagues (2006), older age in conjunction with an increased exposure to traumatic events is a contributing risk factor for PTSD symptoms among Somali and Oromo refugee women resettled in the United States. Similar results were found among Sudanese refugee women residing in Uganda (Karunakara et al., 2004) and postconflict displaced Ethiopians (Araya, Chotai, Komproe, & De Jong, 2011). Refugees seem to suffer more from mental health problems and particularly PTSD in countries of resettlement as demonstrated by a systematic review identifying the prevalence of serious mental health conditions among 7000 refugees resettled in western countries, this study found that refugees were 10 times more likely to develop PTSD compared to their matched counterparts (Fazel, Wheeler, & Danesh, 2005).

Higher rates of prevalence of depression have also been found in studies conducted in refugee women's countries of resettlement and among immigrant women. In fact, a review by Collins, Zimmerman and Howard (2011) found that immigrant and refugee women were at higher risk for post-natal depression (PND) compared to the women in their host countries with

rates of PND between 24% and 42%. Another study conducted in Canada comparing newcomers and Canadian-born women found that refugee immigrant and asylum-seeking women were up to 4 times more likely to experience post partum depression (Stewart, Gagnon, Saucier, Wahoush, & Dougherty, 2008). Similarly, the findings of this study resonate with other research that show alarming rates of gender-based violence and rape among refugee women. For instance, in their study among Congolese women in Rwandan refugee camps, Sipsma and colleagues (2015) found that 49% of the women reported a form of violence (sexual, physical or emotional), where experiences of extreme violence were associated with a form of emotional distress though not PTSD, depression, or anxiety. Some studies suggest that violence, and particularly rape is used as a weapon of war as stipulated in a study conducted by Sideris (2003) among Mozambican refugee women resettled in South Africa as well as central African refugee women (Aron, Corne, Fursland, & Zelwer, 1991). Studies also show a high prevalence of intimate partner violence and domestic violence, as seen among Somali refugee women in the United States (Nilsson, Brown, Russell, & Khamphakdy-Brown, 2008).

The mental health and psychosocial support services encountered in the camps from the included studies varied significantly, as did the level of qualification of the personnel. When available, these services were seldom accessed by the women. Spirituality as a coping mechanism was a very recurrent theme in this scoping review. Though source of polemics among psychiatrist, a systematic review assessing the association between religious commitment and mental health found that 72% of the religious measures assessed (social support, prayer and relationship with God, participation in religious services) were positively associated with mental health, and were found to be beneficial (Larson et al., 1992), this is echoed in the included studies. Likewise, education in emergency settings is thought to provide normalcy and promote

psychological healing (Sinclair, 2007), similarly in a study conducted among Liberian refugee women in Ghana, education was found to provide a long term coping mechanism by building self-reliance. Education can also be source of skill training for refugee women (Tete, 2005).

### 4.2. Limitations

Despite the measures taken to ensure rigour, some limitations can be noted in this study. First of all, the study focused on refugee women residing in refugee camps although about 60% of the world's refugees are thought to be urban refugees, thus residing in cities (UNHCR, 2016d). Grey literature was searched but books didn't meet the inclusion criteria, suggesting that the search methods may have posed a limitation. The included studies were all in English, also suggesting either a lack of studies in French or a poor attempt at gathering studies conducted in French (relevant to West African countries that are mainly francophone). It was also difficult to find studies on the prevalence of mental health problems with female only participants, thus the inclusion of studies with at least 50% female population. Though it augmented the number of included studies, the findings were not specific to women. Conversely this 50% cut off could have also been a limitation, in effect, some studies may have differentiated by gender (men and women) even though women did not make up 50% of the population. Additionally, the focus on three mental health disorders (PTSD, depression, and anxiety) was limiting in its self and a wide net should have been cast to gain a holistic perspective on the mental health ailments of this population. Moreover, the tools used to assess and screen for the presence of mental health problems were not uniform across the included studies and conclusions could not be properly drawn from such methods, in fact, some tools were validated, while others were not; some screened for mental health, some diagnosed and assessed (Table 7). Additionally, the populations varied by age, nationality, and host country (Table 6). Furthermore, studies pertaining to mental

health services in African camps were scarce, and the conclusions drawn regarding that objective were from studies assessing the prevalence of mental disorders, thus a risk of bias as the study settings may have been chosen due the presence or absence of mental health services and consequently limiting the findings. When talking about experiences with mental health, an important limitation stems from culture, modern day definitions of mental health problems are primarily Western, thus refugee women from non-western cultures may not necessarily associate symptoms of depression with depression, and may have their own discourse in that respect as seen in the study by Akinyemi and colleagues (2016). Lastly, despite the attempt at gathering a vast array of literature, only 12 studies met the inclusion criteria; this number is very small and limits the rigor of the results. Despite these limitations, the results from this study provide an initial scope on the current state of knowledge on PTSD, depression, and anxiety among refugee women in African camp settings.

### 4.3. Gaps Identified and Future Directions

Of the twelve included studies, only five focused on women only, there seems to be a dearth of research on the psychological impact of emergency settings on refugee women, especially in African camps. In fact, most of the studies found during the search focused on both genders and most particularly men. This speaks to the lack of research on this population facing a myriad of hardships from pre-migration to post-migration. Additionally, the tools used to assess the prevalence of mental disorders were significantly varied (see Table 7) and conclusions could not be drawn effectively regarding the prevalence of PTSD, depression, and anxiety among refugee women. This poses the question of whether standardized western tools are fitting in the assessment of mental health problems in a population facing mass trauma (Akinyemi et al., 2016; Barber et al., 2016). In fact in their explorative study on the mental suffering among

Palestinians in the occupied Palestinian territory, Barber and colleagues (2016) found that feelings of brokenness and being destroyed captured the suffering of the population more than terms such as depression and trauma-related stress. It might thus be more pertinent in similar contexts, where refugees have faced a plethora of mass trauma, to develop local (*emic*) constructs to measure and/or identify mental health problems.

Moreover, despite some presence of mental health services in the camps, the women rarely accessed the available services. In effect, culture is an important aspect in the expression and acceptance of mental health problems; understanding the local discourse in regards to psychological disorders is thus primordial (Baron et al., 2003; Rasmussen & Annan, 2010). The United Nations Educational Scientific and Cultural Organization (UNESCO) (2015) defines culture as "that complex whole which includes knowledge, beliefs, arts, morals, laws, customs, and any other capabilities and habits acquired by [a human] as a member of society". Some studies have found that there is fear of stigmatization for people suffering with mental disorder, inciting fear of seeking help to avoid marginalization (Ekblad, 2003); some form of fear was expressed by some of the women in one of our included study; lack of comfort and fear of social stigma being cited as reasons for not accessing services by the women in the Farchana camp (PHR, 2009). Furthermore, illness can be explained through various means in the Sub-Saharan context: the result of witchcraft and sorcery, ancestral vengeance, and contact with pollutants being a few examples (Liddell, Barrett, & Baydawell, 2005). Specifically in regards to mental illness, a recent news article also touched upon the taboo surrounding mental illnesses in Kenya, where mental disorders were seen as spiritual afflictions rather than medical problems (Osman, 2016). Mental health also has different connotations attached to it depending on beliefs and traditions; as illustrated in a study conducted by Ventevogel, Jordans, Reis, & de Jong (2013)

examining the perception of mental illness in different African communities; with the aetiology of mental and psychosocial health problems varying from natural to supernatural causes. Research has also shown that "somatisation", a psychiatric term that entails patients producing recurrent/multiple medical symptoms without a distinct organic cause, is common among refugee population (Rohlof, Knipscheer & Kleber, 2014). One of the included studies by Akinyemi and colleagues' (2016) in the Nigerian Oru camp found that both women and men associated physical health with mental health. Linking the importance of having "a sound mind" (p. 280) to being healthy and similarly the impact of poor physical health on the mental health was also brought up, recognising the interdependence and interaction between their physical and mental health. Similarly, spirit injury and somatic distress were evoked by refugee women to describe their mental distress, as found by a study among Mozambican refugees resettled in South Africa (Sideris, 2003). A study conducted by Rasmussen and colleagues (2011) among Darfur refugees found that the refugees had their own discourse to refer to psychological distress such as hozun, meaning deep sadness; wajara galip, meaning pain in heart; kawaf, translating to fear; and majnun signifying madness (p.398). As culture is an essential aspect human life, it is important to consider the local discourse of mental health problems as well as the role of culture in the expression of psychological problems. As mentioned above, these factors should also be a consideration when creating tools to measure and identify mental health problems.

Lastly, spirituality as coping mechanism was evoked among the included studies, this suggest the possibility of including religious figures (such as priests and imams) as part of the mental health infrastructure given the pronounced reliance on spirituality as a coping mechanism. Moreover, future studies in similar contexts could incorporate places of worship as well as their leaders as part of the mental health services.

## 4.4. Conclusions

The toll of emergency situations on the psychosocial wellbeing of refugees, and it's pronounced impact on refugee women is not unknown, however the knowledge base was primarily focused in countries of resettlement. Through a scoping review, this study aimed to address this gap by assessing the state of knowledge on the common mental health disorders seen among refugee women living in African camps. After the close inspection of the 12 studies having met the inclusion criteria; the prevalence of PTSD, depression, and anxiety, the services available and accessed, and finally the experiences of refugee women in the African camps were documented.

Mental health disorders were present among refugee women in African camp, however conclusions regarding prevalence could not be drawn due to the heterogeneity of the included studies as well as the tools used to establish the presence of these mental health problems. PTSD and depression were the most documented. Increased instances of traumatic experiences and older age seemed to negatively impact mental health. Furthermore, mental health is recognised as an important aspect of humanitarian aid and intervention guidelines recommend including mental health as part of the integral response to emergency settings. Nevertheless, this study found that the mental health services available to refugees (men and women) were disparate. There was a substantial lack of qualified personnel and the health worker to refugee ratio was highly insufficient (with as far as 1 social worker for 35,000 refugees) across the included studies. When mental health services were available, there seemed to be a fear stigma and lack of knowledge associated with the services that impeded on women accessing them. Thus the importance of cultural factors in mental health.

When asked about their experiences, women put a higher emphasis on their quality of life and how poor housing; lack of sufficient food; and insecurity impacted their mental health. There were pronounced instances of violence against women (physical and psychological violence, spousal abuse, and rape), perpetrated both during the conflict (in their home countries) and while in the refugee camps. Loss was also an important component of their experiences that had an impact on their mental health; loss of family members, loss of child (sometimes as a result of rape), loss of social support, and loss of purpose were expressed among the women. Family life had an impact on their psychological wellbeing, being divorced and/or separated having a negative impact on their mental health.

Finally although some of the women expressed hopelessness and despair; spirituality and education seemed to be important as coping mechanisms and to instill hope for the future; belief in God, and praying seemed to help the women maintain hope. And the younger women expressed the importance of education as a means of getting to a better place.

In conclusion, the findings from this study suggest a need for tools that include local discourses of mental suffering separate from that of the western construct, as well as the possible inclusion of religious/spiritual leaders and places of worship in the mental health infrastructure.

## References:


Africa population (live). (n.d.) Retrieved from http://www.worldometers.info/world-population/africa-population/

Akinyemi, O. O., Owoaje, E. T., & Cadmus, E. O. (2016). In their own words: Mental health and quality of life of West African refugees in Nigeria. *Journal of International Migration and Integration* [Revue de l'Integration et de La Migration Internationale], *17*(1), 273–287. http://doi.org/http://dx.doi.org/10.1007/s12134-014-0409-6

American Psychiatric Association. (Ed.). (2013a). *Diagnostic and statistical manual of mental disorders* (5th ed). Retrieved from http://psychiatry.org/psychiatrists/practice/dsm

American Psychiatric Association. (Ed.). (2013b). Trauma- and stressor-related disorders. In American Psychiatric Association (Ed.). *Diagnostic and statistical manual of mental disorders* (5th ed). http://doi.org/10.1176/appi.books.9780890425596.dsm07

American Psychiatric Association. (Ed.). (2013c). Depressive disorders. In American Psychiatric Association (Ed.). *Diagnostic and statistical manual of mental disorders* (5th ed). http://doi.org/10.1176/appi.books.9780890425596.dsm04

American Psychiatric Association. (Ed.). (2013d). Anxiety disorders. In American Psychiatric Association (Ed.). *Diagnostic and statistical manual of mental disorders* (5th ed). http://doi.org/10.1176/appi.books.9780890425596.dsm05

Araya, M., Chotai, J., Komproe, I. H., & Jong, J. T. V. M. (2007). Gender differences in traumatic life events, coping strategies, perceived social support and sociodemographics among postconflict displaced persons in ethiopia. *Social Psychiatry and Psychiatric Epidemiology, 42*(4), 307-315. doi:10.1007/s00127-007-0166-3

Araya, M., Chotai, J., Komproe, I. H., & De Jong, J. T. V. M. (2011). Quality of life after postconflict displacement in Ethiopia: Comparing placement in a community setting with that in shelters. *Social Psychiatry and Psychiatric Epidemiology, 46*(7), 585-593. doi:10.1007/s00127-010-0223-1

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. http://doi.org/10.1080/1364557032000119616

Aron, A., Corne, S., Fursland, A., & Zelwer, B. (1991). The gender-specific terror of El Salvador and Guatemala. *Women's Studies International Forum*, *14*(1-2), 37–47. http://doi.org/10.1016/0277-5395(91)90082-S

Barber BK, McNeely CA, El Sarraj E, Daher M, Giacaman R, Arafat C, et al. (2016) Mental Suffering in Protracted Political Conflict: Feeling Broken or Destroyed. *PLoS ONE* 11(5): e0156216. doi:10.1371/journal.pone.0156216

Baron, N., Jensen, S. B., & de Jong, J. T. V. M. (2003). Refugees and internally displaced people. In B. L. Green, M. J. Friedman, J. T. V. M. de Jong, S. D. Solomon, T. M. Keane, J. A. Fairbank, … Y. Danieli (Eds.), *Trauma Interventions in War and Peace: Prevention, Practice, and Policy* (pp. 243–270). Boston, MA: Springer US. http://doi.org/10.1007/978-0-306-47968-7_11

British Broadcasting Corporation (BBC). (2014, May 10). South Sudan: What is the fighting about ?. *BBC News.* Retrieved July 22, 2016 from http://www.bbc.com/news/world-africa-25427965 [accessed 22/07/16]

British Broadcasting Corporation. (2016, June 02). Western Sahara profile. *BBC News*. Retrieved from http://www.bbc.com/news/world-africa-14115273 [accessed 22/07/16]

Bell, S. A., Lori, J., Redman, R., & Seng, J. (2016). Understanding the effects of mental health on reproductive health service use: a mixed methods approach. *Health Care for Women International*, *37*(1), 75–96. http://doi.org/10.1080/07399332.2015.1061525

Betts, A. (2010). The refugee regime complex. *Refugee Survey Quarterly*, *29*(1), 12–37. http://doi.org/10.1093/rsq/hdq009

Cardozo, B. L., Talley, L., Burton, A., & Crawford, C. (2004). Karenni refugees living in Thai–Burmese border camps: traumatic experiences, mental health outcomes, and social functioning. *Social Science & Medicine, 58*(12), 2637-2644. Retrieved from http://dx.doi.org/10.1016/j.socscimed.2003.09.024

Carta, M. G., Oumar, F. W., Moro, M. F., Moro, D., Preti, A., Mereu, A., & Bhugra, D. (2013). Trauma- and stressor related disorders in the Tuareg refugees of a camp in Burkina Faso. *Clinical Practice and Epidemiology in Mental Health : CP & EMH*, *9*, 189–195. http://doi.org/10.2174/1745017901309010189

Collins, C. H., Zimmerman, C., & Howard, L. M. (2011). Refugee, asylum seeker, immigrant women and postnatal depression: rates and risk factors. *Archives of Women's Mental Health*, *14*(1), 3–11. http://doi.org/10.1007/s00737-010-0198-7

Collins, J. S. (1996). *An analysis of the voluntariness of refugee repatriation in Africa* (Master's thesis, University of Manitoba, Winnipeg, Canada). Retrieved from: https://www.umanitoba.ca/institutes/disaster_research/refugee_thesis/chapter2.pdf

Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, *59*(7), 614–625. http://doi.org/10.1037/0003-066X.59.7.614

De Jong, J. P., Scholte, W. F., Koeter, M. W. J., & Hart, A. A. M. (2000). The prevalence of mental health problems in Rwandan and Burundese refugee camps. *Acta Psychiatrica Scandinavica, 102*(3), 171-177. http://doi.org/10.1034/j.1600-0447.2000.102003171.x

Dijkers, M. (2015). What is a Scoping Review? *KT Update*, *4*(1). Retrieved from http://ktdrr.org/products/update/v4n1]

Ekblad, S. (2003). Stigma, refugees and mental disorders. *AINO Journal*, 37–41. Retrieved from: http://ci.nii.ac.jp/els/110004708589.pdf?id=ART0007450839&type=pdf&lang=en&host=cinii&order_no=&ppv_type=0&lang_sw=&no=1477614594&cp=

Ellis, B. H., Murray, K., & Barrett, C. (2014). Understanding the mental health of refugees: Trauma, stress, and the cultural context. In R. Parekh (Ed.), *The Massachusetts general hospital textbook on diversity and cultural sensitivity in mental health* (pp. 165–187). New York, NY: Springer New York.

Encyclopaedia Britannica Online. (2016). Africa. Retrieved on July 22, 2016 from https://www.britannica.com/place/Africa

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *The Lancet*, *365*(9467), 1309–1314. http://doi.org/10.1016/S0140-6736(05)61027-6

Fenta, H., Hyman, I., & Noh, S. (2007). Health service utilization by Ethiopian immigrants and refugees in Toronto. *Journal of Immigrant and Minority Health, 9*(4), 349-357. doi:10.1007/s10903-007-9043-0

Feyera, F., Mihretie, G., Bedaso, A., Gedle, D., & Kumera, G. (2015). Prevalence of depression and associated factors among Somali refugee at Melkadida camp, Southeast Ethiopia: A cross-sectional study. *BMC Psychiatry*, *15*, 171. http://doi.org/10.1186/s12888-015-0539-1

Finlayson, C. (2005). Biogeography and evolution of the genus Homo. *Trends in Ecology & Evolution*, *20*(8), 457–463. http://doi.org/10.1016/j.tree.2005.05.019

George, M. (2012). Migration traumatic experiences and refugee distress: implications for social work practice. *Clinical Social Work Journal*, *40*(4), 429–437. doi:10.1007/s10615-012-0397-y

George, M. (2013). Sri Lankan Tamil refugee experiences: A qualitative analysis. *International Journal of Culture and Mental Health, 6*(3), 170-182. http://dx.doi.org/10.1080/17542863.2012.681669

Gladden, J. (2013). Coping strategies of Sudanese refugee women in Kakuma refugee camp, Kenya. *Refugee Survey Quarterly, 32*(4), 66-89. doi: 10.1093/rsq/hdt017

Gladden, J. L. (2012). *The coping strategies of Sudanese refugee women in Kakuma refugee camp, Kenya* (Doctoral thesis, Michigan State University, East Lansing, Michigan, United States of America). Retrieved from: https://etd.lib.msu.edu/islandora/object/etd%3A700/datastream/OBJ/download/The_coping_strategies_of_Sudanese_refugee_women_in_Kakuma_Refugee_Camp__Kenya.pdf

Grey Literature Database (n.d.). What is grey literature?. Retrieved from *http://www.greylit.org/about* [accessed 04/09/2016]

Holahan C.J., Moos, R.H., & Schaefer, J.A., (1996). Coping, stress resistance, and growth: conceptualizing adaptive functioning. In M. Zeidner & N. S. Endler (Eds.), *The handbook of coping. Theory, research, applications* (pp. 25-43). New York: Wiley.

Hollander, A., Bruce, D., Burstrom, B., & Ekblad, S. (2011). Gender- related mental health differences between refugees and non- refugee immigrants- a cross- sectional register- based study. *BMC Public Health,* 11. Retrieved from http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-11-180

International Organization for Migration (2016). *Key Migration Terms, Retrieved from* http://www.iom.int/key-migration-terms [accessed 29/08/2016]

Integrated Regional Information Networks (IRIN) (2016, June 15), *Has Kenya's brinkmanship over Dadaab worked?*. Retrieved from http://www.refworld.org/docid/576266944.html [accessed 4 September 2016]

The Joanna Briggs Institute. (Ed.). (2015). The Joanna Briggs Institute Reviewers' Manual: 2015 Edition/Supplement. Retrieved from http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual_Methodology-for-JBI-Scoping-Reviews_2015_v2.pdf

Kamau, M., Silove, D. M., Steel, Z., Catanzaro, R., Bateman, C. R., & Ekblad, S. (2004). Psychiatric disorders in an African refugee camp. *Intervention*, *2*(2), 84–89. Retrieved from http://search.proquest.com/docview/42416493?accountid=14701

Karunakara, U. K., Neuner, F., Schauer, M., Singh, K., Hill, K., Elbert, T., Burnham, G. (2004). Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandans in the West Nile. *African Health Sciences*, *4*(2), 83–93. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2141616/

Keely, C. B. (1996). How nation-states create and respond to refugee flows. *International Migration Review Winter*, *30*(4), 1046-1066. Retrieved from

http://go.galegroup.com.proxy.bib.uottawa.ca/ps/i.do?p=AONE&sw=w&u=otta77973&v=2.1&it=r&id=GALE%7CA19027620&asid=bc51eb7cf918578c13046c38561808cc

Kim, G., Torbay, R., & Lawry, L. (2007). Basic health, women's health, and mental health among internally displaced persons in Nyala Province, South Darfur, Sudan. *American Journal of Public Health* , 97 (2), 353–361. https://dx.doi.org/10.2105%2FAJPH.2005.073635

Kinfu, K., Gebremariam, Y., & Tadesse, K. (2014). Magnitude of maternal depression and associated factors in Shimelba refugee camp, Northern Ethiopia, 2014. *International Journal of Pharmaceutical and Biological Sciences Fundamentals (An Indexed, Referred and Impact Factor Journal)*, *08*(01). Retrieved from http://ijpbsf.com/journal%20data/IJPBSFNovember2014_11_22_Kidane.pdf

Larson, D B, Sherrill, K A, Lyons, J S, Craigie, F C, Thielman, S B, Greenwold, M A, & Larson, S S. (1992). Associations between dimensions of religious commitment and mental health reported in the American Journal of Psychiatry and Archives of General Psychiatry: 1978-1989. *The American Journal of Psychiatry, 149*(4), 557-9. http://dx.doi.org/10.1176/ajp.149.4.557

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*, 69. http://doi.org/10.1186/1748-5908-5-69

Liddell, C., Barrett, L., & Bydawell, M. (2005). Indigenous representations of illness and AIDS in Sub-Saharan Africa. *Social Science and Medicine*, *60*(4), 691–700. http://doi.org/10.1016/j.socscimed.2004.06.020

Loescher, G. (2008). *Protracted refugee situations : Political, human rights and security implications*. Tokyo ; New York: Tokyo ; New York : United Nations University Press, c2008.

Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., … Saxe, G. N. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*(1), 24–36. http://dx.doi.org/10.1097/00004583-200401000-00012

McFadyen, G. (2012). The contemporary refugee : Persecution , semantics and universality. *Special edition: The 1951 UN refugee convention - 60 years on*, 9–35. http://www.gla.ac.uk/esharp

Meredith, M. (2005). *The fate of Africa : From the hopes of freedom to the heart of despair : A history of fifty years of independence* (1st ed.). New York: Public Affairs.

Mollica, R. F., Donelan, K., Tor, S., Lavelle, J., Elias, C., Frankel, M., et al. (1993). The effect of trauma and confinement on functional health and mental health status of Cambodians living in Thailand-Cambodia border camps. *Journal of the American Medical Association, 270*(5), 581-586. doi:10.1001/jama.1993.03510050047025

Morof, D. F., Sami, S., Blanton, C., Cardozo, B. L., Tomczyk, B., & Mangeni, M. (2014). A cross- sectional survey on gender- based violence and mental health among female urban refugees and asylum seekers in Kampala, Uganda. *International Journal of Gynecology and Obstetrics, 127*(2), 138-143. http://dx.doi.org/10.1016/j.ijgo.2014.05.014

Nilsson, J. E., Brown, C., Russell, E. B., & Khamphakdy-Brown, S. (2008). Acculturation, partner violence, and psychological distress in refugee women from Somalia. *Journal of Interpersonal Violence*, *23*(11), 1654–1663. http://doi.org/10.1177/0886260508314310

N’Dimina-Mougala, A.-D. (2007). Les conflits africains au XXe siècle. *Guerres Mondiales et Conflits Contemporains*, *225*(1), 121. http://doi.org/10.3917/gmcc.225.0121

Organization of African Unity (Publisher). (1969, September 10). *Convention governing the specific aspects of refugee problems in Africa ("OAU Convention")*, Retrieved from http://www.refworld.org/docid/3ae6b36018.html [accessed 22 July 2016]

Onyut, L. P., Neuner, F., Ertl, V., Schauer, E., Odenwald, M., & Elbert, T. (2009). Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement: An epidemiological study. *Conflict and Health*, *3*. http://doi.org/http://dx.doi.org/10.1186/1752-1505-3-6

Onyut, L., Neuner, F., Schauer, E., Ertl, V., Odenwald, M., Elbert, T., et al. (2004) The Nakivale camp mental health project: Building local competency for psychological assistance to traumatized refugees. *Intervention* 2(2), 90–107. Retrieved from https://psychotraumanet.org/sites/default/files/documents/int_026.pdf

Osman, O.M., (2016, April 18). The taboo of mental illness in Kenya. *Al Jazeera News.* Retrieved from http://www.aljazeera.com/indepth/features/2016/04/taboo-mental-illness-kenya-160406093345546.html

Papadopoulos, R. K. (2007). Refugees, trauma and adversity- activated development. *European Journal of Psychotherapy & Counselling, 9*(3), 301-312. http://dx.doi.org/10.1080/13642530701496930

Parmar, P., Agrawal, P., Greenough, P. G., Goyal, R., & Kayden, S. (2012). Sexual violence among host and refugee population in Djohong district, Eastern Cameroon. *Global Public Health, 7*(9), 974-994. http://doi./10.1080/17441692.2012.688061

Pavlish, C. (2005). Action responses of Congolese refugee women. *Journal of Nursing Scholarship*, *37*(1), 10–17. http://doi.org/10.1111/j.1547-5069.2005.00010.x

Pedersen, D. (1996). Disease ecology at a crossroads: Man-made environments, human rights and perpetual development utopias. *Social Science & Medicine, 43*(5), 745-758. doi:10.1016/0277-9536(96)00119-0

Pedersen, D. (2002). Political violence, ethnic conflict, and contemporary wars: Broad implications for health and social well-being. *Social Science and Medicine, 55*(2), 175-190. doi:10.1016/S0277-9536(01)00261-1

Physicians for Human Rights. (2009). Nowhere to turn: Failure to protect, support and assure justice for Darfuri women. Retrieved from https://s3.amazonaws.com/PHR_Reports/nowhere-to-turn.pdf

Prandi, S. (2016, March 10). Eritrean refugees in Ethiopia. *Al-Jazeera English.* Retrieved from http://www.aljazeera.com/indepth/inpictures/2016/03/eritrean-refugees-ethiopia-160306065928790.html [accessed 22/07/16]

Rasmussen, A., & Annan, J. (2010). Predicting stress related to basic needs and safety in Darfur refugee camps: A structural and social ecological analysis. *Journal of Refugee Studies*, *23*(1), 23–40. http://doi.org/10.1093/jrs/fep044

Rasmussen, A., Katoni, B., Keller, A. S., & Wilkinson, J. (2011). Posttraumatic idioms of distress among Darfur refugees: Hozun and majnun. *Transcultural Psychiatry*, *48*(4), 392–415. http://doi.org/10.1177/1363461511409283

Robertson, C. L., Halcon, L., Savik, K., Johnson, D., Spring, M., Butcher, J., … Jaranson, J. (2006). Somali and Oromo refugee women: Trauma and associated factors. *Journal of Advanced Nursing*, *56*(6), 577–587. http://doi.org/10.1111/j.1365-2648.2006.04057.x

Rohlof, H. G., Knipscheer, J. W., & Kleber, R. J. (2014). Somatization in refugees: A review. *Social Psychiatry and Psychiatric Epidemiology, 49*(11), 1793–1804. http://doi.10.1007/s00127-014-0877-1

Schauer, M., & Schauer, E. (2010). Trauma-focused public mental-health interventions: A paradigm shift in humanitarian assistance and aid work. In E. Martz (Ed.), *Trauma Rehabilitation After War and Conflict* (pp. 389–428). New York, NY: Springer New York.

Schweitzer, R., Melville, F., Lacherez, P., & Steel, Z. (2006). Trauma, post-migration living difficulties, and social support as predictors of psychological adjustment in resettled Sudanese refugees. *Australian and New Zealand Journal of Psychiatry, 40*(2), 179-187. http://doi.10.1080/j.1440-1614.2006.01766.x

Shillington, K. (2005). *History of Africa* (Rev. 2nd ed.). Oxford : New York: Macmillan Education ; Palgrave Macmillan.

Sideris, T. (2003). War, gender and culture: Mozambican women refugees. *Social Science & Medicine (1982)*, *56*(4), 713–724. http://dx.doi.org/10.1016/S0277-9536(02)00067-9

Since Alan Kurdi drowned, Mediterranean deaths have soared. (2016, September 02). *The United Nations High Commissioner for Refugees*. Retrieved from http://www.unhcr.org/news/latest/2016/9/57c9549e4/since-alan-kurdi-drowned-mediterranean-deaths-soared.html

Sinclair, M. (2007). Education in emergencies. *Commonwealth Education Partnerchips*. Retrieved from http://www.cedol.org/wp-content/uploads/2012/02/52-56-2007.pdf

Sipsma, H. L., Falb, K. L., Willie, T., Bradley, E. H., Bienkowski, L., Meerdink, N., & Gupta, J. (2015). Violence against Congolese refugee women in Rwanda and mental health: a

cross-sectional study using latent class analysis. *BMJ Open*, *5*(4), 1–7. http://doi.org/10.1136/bmjopen-2014-006299

Stewart, D. E., Gagnon, A., Saucier, J.-F., Wahoush, O., & Dougherty, G. (2008). Postpartum depression symptoms in newcomers. *The Canadian Journal of Psychiatry*, *53*(2), 121–124. http://doi.org/10.1177/070674370805300208

Tempany, M. (2009). What research tells us about the mental health and psychosocial wellbeing of Sudanese refugees: A literature review. Transcultural Psychiatry, 46(2), 300—315. http://doi.10.1177/1363461509105820

Tete, S. Y. A. (2005). Narratives of hope? Displacement narratives of Liberian refugee women and children in the Gomoa-Budumburam refugee camp in Ghana. (Master's thesis, Norges teknisk-naturvitenskapelige universitet, Trondheim, Norway). Retrieved from http://hdl.handle.net/11250/265001

United Nations, Educational, Scientific, and Cultural Organization (UNESCO). (2016). *Cultural Diversity*. Retrieved from http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/cultural-diversity/

United Nations High Commissioner for Refugees. (1956). UNHCR - Convention and Protocol Relating to the Status of Refugees. *Convention and Protocol Relating to the Status of Refugees*. http://doi.org/10.1093/iclqaj/6.3.533

United Nations High Commissioner for Refugees. (1979). Handbook on procedures and criteria for determining refugee status: Under the 1951 Convention and the 1967 Protocol relating to the status of refugees (p. 3). Geneva: Office of the United Nations High Commissioner for Refugees.

United Nations High Commissioner for Refugees (2002). *Addressing the causes of migratory and refugee movements: The role of the European Union* (ISSN 1020-7473). Retrieved from http://www.refworld.org/docid/4ff3f6272.html [accessed 3 September 2016]

United Nations High Commissioner for Refugees. (2003). *No solutions in sight: the problem of protracted refugee situations in Africa* (ISSN 1020-7473). Retrieved from http://www.refworld.org/docid/4ff3f4d12.html [accessed 4 September 2016]

United Nations High Commissioner for Refugees. (2004). *Protracted Refugee Situations* (EC/54/SC/CRP.14). Retrieved from http://www.refworld.org/docid/4a54bc00d.html [accessed 4 September 2016]

United Nations High Commissioner for Refugees. (2013). *The Cartagena Declaration on Refugees and the Protection of People Fleeing Armed Conflict and Other Situations of Violence in Latin America* (PPLA/2013/03). Retrieved from http://www.refworld.org/docid/51c801934.html [accessed 4 September 2016]

United Nations High Commissioner for Refugees (2013). UNHCR's Mental Health and Psychosocial Support for Persons of Concern. *The United Nations High Commissioner for Refugees.* Retrieved from http://www.unhcr.org/51bec3359.html

United Nations High Commissioner for Refugees. (2014, June 20). Resolve Conflicts or Face Surge in Life-long Refugees Worldwide, Warns UNHCR Special Envoy. *The United Nations High Commissioner for Refugees.* Retrieved from http://www.unhcr.org/news/press/2014/6/53a42f6d9/resolve-conflicts-face-surge-life-long-refugees-worldwide-warns-unhcr-special.html

United Nations High Commissioner for Refugees. (2016a). Figures at a glance. Retrieved from http://www.unhcr.org/figures-at-a-glance.html [accessed 25/08/2016]

United Nations High Commissioner for Refugees. (2016b). Africa. Retrieved from http://www.unhcr.org/africa.html [accessed 25/08/2016]

United Nations High Commissioner for Refugees. (2016c). *Global Trends: Forced Displacement in 2015*, 20 June 2016. Retrieved from http://www.refworld.org/docid/57678f3d4.html [accessed 3 September 2016]

United Nations High Commissioner for Refugees. (2016d). Urban refugees. Retrieved from http://www.unhcr.org/urban-refugees.html [Accessed 04/09/2016]

Ventevogel, P., Jordans, M., Reis, R., & de Jong, J. (2013). Madness or sadness? Local concepts of mental illness in four conflict-affected African communities. *Conflict and Health, 7*(1), 3. Retrieved from https://conflictandhealth.biomedcentral.com/articles/10.1186/1752-1505-7-3

Wilkinson, R. (1997, December 1). Refugees magazine issue 110 (crisis in the Great Lakes) – cover story: Heart of Darkness. *The United Nations High Commissioner for Refugees.* Retrieved from http://www.unhcr.org/publications/refugeemag/3b6925384/refugees-magazine-issue-110-crisis-great-lakes-cover-story-heart-darkness.html

WHO (1948). *Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference*. Retrieved from http://www.who.int/about/definition/en/print.html [accessed 02/09/2016]

World Health Organization (2001). *Strengthening Mental Health Promotion*. (Fact sheet no. 220). Retrieved from http://www.who.int/mediacentre/factsheets/fs220/en/

World Health Organization. (2002). *World Report on Violence and Health* (22 Suppl 2(9339), 327–36). http://doi.org/10.1016/S0140-6736(02)11133-0

World Health Organization. (2014). *WHO Mental Health Report on Refugee Camps in Gambella Region 10-17 May 2014, Gambella, Ethiopia*. *Medicina* (Vol. 30). Retrieved from

http://www.afro.who.int/en/ethiopia/press-materials/item/6573-who-mental-health-report-on-refugee-camps-in-gambella-region.html

World Health Organization and Calouste Gulbenkian Foundation. (2014). Social determinants of mental health. Geneva, World Health Organization, 2014.

World Health Organization. (2016). Social Determinants of Health. Retrieved from http://www.who.int/social_determinants/en/ [accessed 04/09/2016)

Zeleza, P. T., (2008). The causes & costs of war in Africa: From liberation struggles to the 'War on Terror'. In J. Currey (Ed.). *The roots of African conflicts : The causes & costs* (pp. 1-35). Oxford: James Currey

Zolberg, A. (1983). The formation of new States as a refugee-generating process. *The Annals of the American Academy of Political and Social Science*, *467*(1). Retrieved from http://resolver.scholarsportal.info/resolve/00027162/v467i0001/24_tfonsaarp.xml

# APPENDICES

## APPENDIX A – Protocol

**Protocol – The State of Knowledge on PTSD, Depression and Anxiety among Refugee Women in Africa – A Scoping Review**

### Rationale and background

With over 50 million refugees in the world, 86% live in the developing world. Furthermore, with a global average of 17 years in refugee camps it is evident that measures need to be taken to ensure that these refugees who have lost their homes and are hoping to return home find some solace in the otherwise permanent temporary shelters (UNHCR, 2014). Africa is home to approximately 15 million people of concern due to massive displacement (including refugees, internally displaced persons and asylum seekers) according to the UNHCR, accounting for close to one third of the world's displaced population (UNHCR, 2015).

Furthermore, according to studies, women encounter more burdens and have higher mental health prevalence's than men (Loescher, 2008; Kamau et al., 2004; Cardozo, et al., 2004; Gladden, 2013; Araya et al., 2007). Additionally, refugee women seem to have a higher prevalence of mental illness such as PTSD, depression and anxiety (Kim et al., 2007; Morof et al., 2014; Parmar et al., 2012).

### Review question:

What is the State of Knowledge on Posttraumatic Stress Disorder (PTSD), Depression and Anxiety Among Refugee Women in Africa?

### Objectives:

1. To identify the prevalence of PTSD, depression and anxiety among refugee women in camps in Africa.

2. To identify the services available to treat mental health problems (specifically, PTSD, depression and/or anxiety) in refugee camps in Africa

3. To identify the gaps in knowledge and the experiences of refugee women in regards to mental health (depression, PTSD, and anxiety) in the context of African camps.

### Searches:

MEDLINE (OVID), PsycINFO (OVID), Embase (OVID), Global Health, CINHAL, PILOTS, Sociological Abstracts, PubMed, and SCOPUS*.

(*For citation searching)

*Concept* 1: Refugee

• Search words: Asylum seekers, refugees

*Concept* 2: Women

• Search Words: Woman/women, female(s), mothers, wives (wife)

*Concept* 3: Mental Health

• Search words: Anxiety, depression, stress, PTSD, post-traumatic stress disorder, psychosocial stress, mental health, mental health services

**Types of study to be included:**

Qualitative and quantitative studies of all sorts, relevant grey literature. Studies published in English and/or French. Publication year: 2000 – Current.

**Condition or domain being studied**

Mental health, depression, post-traumatic stress disorder and anxiety;

**Participants/population**

• Refugee women in African camps

• 18 and older

• Refugee women having (had) experience with PTSD/depression/anxiety

**Intervention(s), exposures(s)**

• Seeking refuge

• Seeking help for mental health disorders (PTSD, depression and/or anxiety)

• Experiencing PTSD, depression and/or anxiety

**Outcome(s):**

*Primary outcomes*

• Prevalence of PTSD, depression and/or anxiety

• Mental health services available

• Knowledge on PTSD, depression and/or anxiety

**Data extraction, (selection and coding)**

Articles will be extracted and imported into a reference manager (Mendeley). All articles will be given a unique reference number within the database. Covidence (covidence.org) will be used for data extraction and SPSS will be used for statistical analysis (if necessary).

Two reviewers will screen titles and abstracts of potentially relevant articles and full text copies will

be obtained for all articles meeting initial screening by at least one reviewer. Two independent reviewers will examine full text articles and any discrepancies will be resolved with a discussion and if a consensus is not reached a third reviewer (supervisor) will resolve any conflict. Consensus will be obtained for all included articles.

**Risk of bias (quality) assessment**

Risk of bias will be assessed using Delgado-Rodriguez & Llorca (2004) table 1, listing the possible types of biases according to the study design.

Young and Solomon (2009) will be used to critically appraise each article before inclusion.

STROBE, AMSTAR, GRADE (Grading of Recommendations Assessment, Development and Evaluation) and CONSORT checklists will be used when applicable.

**Strategy for data analysis**

A meta-analysis will be undertaken if the studies included in the review are sufficiently homogeneous. Otherwise the data will be presented in a narrative form.

**Dissemination plans**

The results from the study will be presented in the format of a manuscript for the completion of the thesis. The study will also be submitted for peer-review for publication and dissemination among peers. Findings will be submitted and presented at conferences.

**Contact details for further information**

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2. Sanni Yaya, PhD

## APPENDIX B – Embase search

1. refugee/ or asylum seeker/ or refugee camp/

2. refugee*.ti,ab.

3. (asylum adj2 seek*).ti,ab.

4. 1 or 2 or 3

5. posttraumatic stress disorder/

6. anxiety disorder/ or anxiety/

7. depression/

8. ((posttraumat* or post-trauma*) adj2 stress).ti,ab.

9. (depression or depressive).ti,ab.

10. anxiety.ti,ab.

11. PTSD.ti,ab.

12. mental health/

13. mental health.ti,ab.

14. or/5-13

15. 4 and 14

16. Female/

17. Women's health/

18. Mother/

19. (wom?n or female* or mother* or wife or wives).ti,ab.

20. or/16-19

21. 15 and 20

22. (Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayote or Morocco or Mo?ambique or Namibia or Niger* or Principe or Reunion or Rwanda* or Sao Tome or Senegal or Seychelles or Sierra Leone or Somalia or "st Helena" or Sudan* or Swaziland or Tanzania* or Togo or Tunisia* or Uganda* or Zaire or Zambia or Zimbabwe).ti,ab.

23. (Jamahiriy* or Kenya* or Lesotho or Liberia* or Lib?a).ti,ab.

24. (Africa* or Algeria* or Angola* or Benin or Botswana* or Burkina Faso or Burundi* or Cameroon* or Canary Islands or Cape Verde or Chad or Comoros or Congo* or Djibouti or Egypt* or Eritrea* or Ethiopia* or Gabon or Gambia or Ghana or Guinea or Ivory Coast or "Cote d'Ivoire").ti,ab.

25. sahara*.ti,ab.

26. exp africa/

27. or/22-26

28. 21 and 27

29. limit 28 to ((english or french) and yr="2000 -Current")

## APPENDIX C – Medline search

1. Refugees/

2. refugee*.ti,ab.

3. (asylum adj2 seek*).ti,ab.

4. 1 or 2 or 3

5. Stress Disorders, Post-Traumatic/

6. Anxiety/ or Anxiety Disorders/

7. Depression/

8. Depressive Disorder/

9. PTSD.ti,ab.

10. ((posttraumat* or post-trauma*) adj2 stress).ti,ab.

11. anxiety.ti,ab.

12. Mental Health/

13. exp Mental Health Services/

14. (depression or depressive).ti,ab.

15. or/5-14

16. 4 and 15

17. Women/

18. Female/

19. Women's Health/

20. Mothers/

21. (wom?n or female* or mother* or wives or wife).ti,ab.

22. or/17-21

23. 16 and 22

24. limit 23 to (yr="2000 -Current" and (english or french))

25. (Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayote or Morocco or Mo?ambique or Namibia or Niger* or Principe or Reunion or Rwanda* or Sao Tome or Senegal or Seychelles or Sierra Leone or Somalia or "st Helena" or Sudan* or Swaziland or Tanzania* or Togo or Tunisia* or Uganda* or Zaire or Zambia or Zimbabwe).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]

26. (Jamahiriy* or Kenya* or Lesotho or Liberia* or Lib?a).ti,ab.

27. (Africa* or Algeria* or Angola* or Benin or Botswana* or Burkina Faso or Burundi* or Cameroon* or Canary Islands or Cape Verde or Chad or Comoros or Congo* or Djibouti or Egypt* or Eritrea* or Ethiopia* or Gabon or Gambia or Ghana or Guinea or Ivory Coast or "Cote d’Ivoire").ti,ab.

28. sahara*.ti,ab.

29. exp africa/

30. or/25-29

31. 24 and 30

*Medline search with mental health in Title and Abstract → 32 newish articles*

1. Refugees/

2. refugee*.ti,ab.

3. (asylum adj2 seek*).ti,ab.

4. 1 or 2 or 3

5. Stress Disorders, Post-Traumatic/

6. Anxiety/ or Anxiety Disorders/

7. Depression/

8. Depressive Disorder/

9. PTSD.ti,ab.

10. ((posttraumat* or post-trauma*) adj2 stress).ti,ab.

11. anxiety.ti,ab.

12. Mental Health/

13. exp Mental Health Services/

14. (depression or depressive).ti,ab.

15. or/5-14

16. 4 and 15

17. Women/

18. Female/

19. Women's Health/

20. Mothers/

21. (wom?n or female* or mother* or wives or wife).ti,ab.

22. or/17-21

23. 16 and 22

24. limit 23 to (yr="2000 -Current" and (english or french))

25. (Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayote or Morocco or Mo?ambique or Namibia or Niger* or Principe or Reunion or Rwanda* or Sao Tome or Senegal or Seychelles or Sierra Leone or Somalia or "st Helena" or Sudan* or Swaziland or Tanzania* or Togo or Tunisia* or Uganda* or Zaire or Zambia or Zimbabwe).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]

26. (Jamahiriy* or Kenya* or Lesotho or Liberia* or Lib?a).ti,ab.

27. (Africa* or Algeria* or Angola* or Benin or Botswana* or Burkina Faso or Burundi* or Cameroon* or Canary Islands or Cape Verde or Chad or Comoros or Congo* or Djibouti or Egypt* or Eritrea* or Ethiopia* or Gabon or Gambia or Ghana or Guinea or Ivory Coast or "Cote d'Ivoire").ti,ab.

28. sahara*.ti,ab.

29. exp africa/

30. or/25-29

31. 24 and 30

32. mental health.ti,ab.

33. 4 and 22 and 30 and 32

34. 33 not 31

## APPENDIX D – PsycInfo search

1. Refugee/
2. refugee*.ti,ab.
3. (asylum adj2 seek*).ti,ab.
4. or/1-3
5. Mental health/
6. Mental health.ti,ab.
7. Posttraumatic Stress Disorder/
8. Major Depression/ or "Depression (Emotion)"/
9. anxiety.ti,ab.
10. (depression or depressive).ti,ab.
11. ((posttraumat* or post-trauma*) adj2 stress).ti,ab.
12. PTSD.ti,ab.
13. Anxiety Disorders/ or Anxiety/
14. Human Females/
15. Mothers/
16. wives/
17. (wom?n or female* or mother* or wife or wives).ti,ab.
18. or/14-17
19. (Jamahiriy* or Kenya* or Lesotho or Liberia* or Lib?a).ti,ab,lo.
20. (Madagascar or Malawi or Mali or Mauritania or Mauritius or Mayote or Morocco or Mo?ambique or Namibia or Niger* or Principe or Reunion or Rwanda* or Sao Tome or Senegal or Seychelles or Sierra Leone or Somalia or "st Helena" or Sudan* or Swaziland or Tanzania* or Togo or Tunisia* or Uganda* or Zaire or Zambia or Zimbabwe).ti,ab,lo.
21. (Africa* or Algeria* or Angola* or Benin or Botswana* or Burkina Faso or Burundi* or Cameroon* or Canary Islands or Cape Verde or Chad or Comoros or Congo* or Djibouti or Egypt* or Eritrea* or Ethiopia* or Gabon or Gambia or Ghana or Guinea or Ivory Coast or "Cote d'Ivoire").ti,ab,lo.
22. sahara*.ti,ab,lo.
23. or/19-22
24. 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
25. 4 and 18 and 23 and 24
26. limit 25 to yr="2000 -Current"
27. limit 26 to (english or french)

# APPENDIX E – CINAHL search

Monday, February 08, 2016 12:29:44 PM

| # | Query | Limiters/Expanders | Last Run Via | Results |
|---|---|---|---|---|
| S23 | S21 AND S22 | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S22 | (MH "Africa") OR (MH "Africa South of the Sahara") OR (MH "Africa, Western") OR (MH "Africa, Southern") OR (MH "Africa, Northern") OR (MH "Africa, Eastern") OR (MH "Africa, Central") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S21 | S15 AND S20 | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S20 | ((TI wom?n OR female* OR mother* OR wife OR wives OR AB wom?n OR female* OR mother* OR wife OR wives) OR S16 OR S17 OR S18 OR S19 | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S19 | TI ( wom?n OR female* OR mother* OR wife OR wives ) OR AB ( wom?n OR female* OR mother* OR wife OR wives ) | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S18 | (MH "Female") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search | Display |

| | | | | |
|---|---|---|---|---|
| | | | Database - CINAHL | |
| S17 | (MH "Mothers") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S16 | (MH "Women") OR (MH "Women's Health Services") OR (MH "Women's Health") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S15 | S4 AND S14 | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S14 | S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S13 | (MH "mental health services") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S12 | (MH "mental health") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S11 | TI ( depressive or depression ) OR AB ( depressive or depression ) | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S10 | TI PTSD OR AB PTSD | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |

| | | | | |
|---|---|---|---|---|
| S9 | TI anxiety OR AB anxiety | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S8 | TI ( (posttrauma* or post-trauma*) N2 stress ) OR AB ( (posttrauma* or post-trauma*) N2 stress ) | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S7 | (MH "Depression") OR (MH "Depression, Postpartum") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S6 | (MH "Anxiety Disorders") OR (MH "Anxiety") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S5 | (MH "Stress Disorders, Post-Traumatic") | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S4 | S1 OR S2 OR S3 | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S3 | TI asylum N2 seek* OR AB asylum N2 seek* | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S2 | TI refugee* OR AB refugee* | Expanders - Apply related words<br>Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL | Display |
| S1 | (MH "Refugees") | Expanders - Apply | Interface - EBSCOhost | Display |

| | | |
|---|---|---|
| | related words<br>Search modes - Boolean/Phrase | Research Databases<br>Search Screen - Advanced Search<br>Database - CINAHL |

## APPENDIX F – Global Health search

(« refugees » OR refugee OR « asylum seekers ») AND (« mental health » OR « 90épression » OR « anxiety » OR posttrauma* OR post-trauma* OR PTSD) AND (« women » OR « women's health » OR « mothers » OR female* OR woman) AND (africa* OR « Africa » OR « Africa South of Sahara » OR « Anglophone Africa » OR « Francophone Africa » OR « North Africa » OR « Portuguese Speaking Africa » OR « tropical Africa » OR « Afrotropical Region » OR « Africa (Sahelian Zone) »)

## APPENDIX G – Sociological Abstracts search

(((SU.EXACT("Refugees") OR SU.EXACT("Asylum") OR ti(asylum NEAR/2 seek*) OR ab(asylum NEAR/2 seek*)) AND ((SU.EXACT("Posttraumatic Stress Disorder") OR SU.EXACT("Anxiety") OR (SU.EXACT("Mental Health") OR SU.EXACT("Mental Health Services")) OR SU.EXACT("Depression (Psychology)")) OR (ti(Depression OR depressive) OR ab((Depression OR depressive)) OR ti(("Postrauma* NEAR/2 stress" OR "post-trauma* NEAR/2 stress")) OR ab(("Postrauma* NEAR/2 stress" OR "post-trauma* NEAR/2 stress")) OR ti(("mental health" OR anxiety)) OR ab(("mental health" OR anxiety)) OR ti(PTSD) OR ab(PTSD)))) AND ((SU.EXACT("Mothers") OR SU.EXACT("Females")) OR SU.EXACT("Womens Health Care") OR ti((wom?n OR female*)) OR ab(wom?n OR female*) OR SU.EXACT("Wives") OR ti((wife OR wives)) OR ab((wife OR wives)) OR ti(mother*) OR ab(mother*))) AND pd(20000101-20161231)

## APPENDIX H – PILOTS search

(((SU.EXACT("Females") AND ((SU.EXACT("Depressive Disorders") OR SU.EXACT("Anxiety Disorders") OR SU.EXACT("PTSD")) OR (ti(Depression OR depressive) OR ab((Depression OR depressive)) OR ti(("Postrauma* NEAR/2 stress" OR "post-trauma* NEAR/2 stress")) OR ab(("Postrauma* NEAR/2 stress" OR "post-trauma* NEAR/2 stress")) OR ti(("mental health" OR anxiety)) OR ab(("mental health" OR anxiety)) OR ti(PTSD) OR ab(PTSD)))) AND ((SU.EXACT("Refugees") OR SU.EXACT("Displaced Persons") OR SU.EXACT("Asylum Seekers")) OR (ti(asylum NEAR/2 seek*) OR ab(asylum NEAR/2 seek*)))) AND SU.EXACT("Africans" OR "Algerians" OR "Angolans" OR "Basotho" OR "Batswana" OR "Beninese" OR "Brazzaville Congolese" OR "Burkinabe" OR "Burundians" OR "Cameroonians" OR "Cape Verdeans" OR "Central Africans" OR "Chadians" OR "Comorans" OR "Darfuris" OR "Djiboutians" OR "Equatorial Guineans" OR "Eritreans" OR "Ethiopians" OR "Gabonese" OR "Gambians" OR "Ghanaians" OR "Guinea-Bissauans" OR "Guineans" OR "Ivoirians" OR "Kenyans" OR "Kinshasa Congolese" OR "Liberians" OR "Libyans" OR "Mahorais" OR "Malagasy" OR "Malawians" OR "Malians" OR "Mauritanians" OR "Mauritians" OR "Moroccans" OR "Mozambicans" OR "Namibians" OR "Nigerians" OR "Nigeriens" OR "Reunionese" OR "Rwandans" OR "Sahrawis" OR "Saint Helenians" OR "Sao Tomeans" OR "Senegalese" OR "Sierra Leoneans" OR "Somalis" OR "South Africans" OR "South Sudanese" OR "Sudanese" OR "Swazis" OR "Tanzanians" OR "Togolese" OR "Tunisians" OR "Ugandans" OR "Zambians" OR "Zimbabweans")) AND pd(20000101-20161231)

# APPENDIX I – Pubmed search

**Pubmed search (02/03/2016)**

((((((((women*[Title/Abstract]) OR woman*[Title/Abstract]) OR female[Title/Abstract]) OR wive*[Title/Abstract]) OR wife[Title/Abstract])) AND (((((((PTSD[Title/Abstract]) OR post-trauma* AND stress[Title/Abstract]) OR posttrauma* AND stress[Title/Abstract]) OR anxiety[Title/Abstract]) OR depression[Title/Abstract]) OR depressive[Title/Abstract]) OR "mental health"[Title/Abstract])) AND ((refugee*[Title/Abstract]) OR asylum seek*[Title/Abstract])) AND publisher[sb]

## APPENDIX J – Reference list of the 45 full text articles screened


**#33** Akinyemi, O. O., Owoaje, E. T., & Cadmus, E. O. (2016). In Their Own Words: Mental Health and Quality of Life of West African Refugees in Nigeria. *Journal of International Migration and Integration = Revue de l'Integration et de La Migration Internationele*, *17*(1), 273–287. http://doi.org/http://dx.doi.org/10.1007/s12134-014-0409-6

#239 Akinyemi, O. O., Owoaje, E. T., Ige, O. K., & Popoola, O. A. (2012). Comparative study of mental health and quality of life in long-term refugees and host populations in Oru-Ijebu, Southwest Nigeria. *BMC Research Notes*, *5*, 394. http://doi.org/10.1186/1756-0500-5-394

#235 Araya, M., Chotai, J., Komproe, I. H., & de Jong, J. T. V. M. (2007). Effect of trauma on quality of life as mediated by mental distress and moderated by coping and social support among postconflict displaced Ethiopians. *Quality of Life Research : An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, *16*(6), 915–927. http://doi.org/10.1007/s11136-007-9201-9

#95 Bandeira, M., Higson-Smith, C., Bantjes, M., & Polatin, P. (2010). The land of milk and honey: a picture of refugee torture survivors presenting for treatment in a South African trauma centre. *Torture : Quarterly Journal on Rehabilitation of Torture Victims and Prevention of Torture*, *20*(2), 92–103. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med5&NEWS=N&AN=20952825

**#68** Bell, S. A., Lori, J., Redman, R., & Seng, J. (2016). Understanding the Effects of Mental Health on Reproductive Health Service Use: A Mixed Methods Approach. *Health Care for Women International*, *37*(1), 75–96. http://doi.org/10.1080/07399332.2015.1061525

#242 Bell, S. A., Lori, J., Redman, R., & Seng, J. (2015). Development of a brief screening tool for women's mental health assessment in refugee settings: A psychometric evaluation. *International Journal of Nursing Studies*, *52*(7), 1202–8. http://doi.org/10.1016/j.ijnurstu.2015.04.003

**#184** Carta, M. G., Oumar, F. W., Moro, M. F., Moro, D., Preti, A., Mereu, A., & Bhugra, D. (2013). Trauma- and stressor related disorders in the tuareg refugees of a cAMP in burkina faso. *Clinical Practice and Epidemiology in Mental Health : CP & EMH*, *9*, 189–195.

#167 de Jong, J. P., Scholte, W. F., Koeter, M. W., & Hart, A. A. (2000). The prevalence of mental health problems in Rwandan and Burundese refugee camps. *Acta Psychiatrica Scandinavica*, *102*(3), 171–177.

**#244** Feyera, F., Mihretie, G., Bedaso, A., Gedle, D., & Kumera, G. (2015). Prevalence of depression and associated factors among Somali refugee at Melkadida camp, Southeast Ethiopia: a cross-sectional study. *BMC Psychiatry*, *15*, 171. http://doi.org/10.1186/s12888-015-0539-1

#193 Fox, S. H., & Tang, S. S. (2000). The Sierra Leonean refugee experience: traumatic events and psychiatric sequelae. *The Journal of Nervous and Mental Disease*, *188*(8), 490–495.

#80 Fox, S. H. (2003). The Mandinka nosological system in the context of post-trauma syndromes. *Transcultural Psychiatry*, *40*(4), 488–506. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med4&NEWS=N&AN=14979464

#19 Halcón, L. L., Robertson, C. L., & Monsen, K. A. (2010). Evaluating health realization for coping among refugee women. *Journal of Loss and Trauma*, *15*(5), 408–425. http://doi.org/http://dx.doi.org/10.1080/15325024.2010.507645

#173 Hamid, A. A. R. M., & Musa, S. A. (2010). Mental health problems among internally displaced persons in Darfur. *International Journal of Psychology : Journal International de Psychologie*, *45*(4), 278–285. http://doi.org/10.1080/00207591003692620

#280 Idemudia, E. S., William, J. K., Boehnke, K., & Wyatt, G. (2013). Gender Differences in Trauma and Posttraumatic Stress Symptoms among Displaced Zimbabweans in South Africa. *Journal of Traumatic Stress Disorders & Treatment*, *2*(3), 1340. http://doi.org/10.4172/2324-8947.1000110

#86 John-Langba, J. (2007). The relationship of sexual and gender-based violence to sexual-risk behaviour among refugee women in Sub-Saharan Africa. *World Health & Population*, *9*(2), 26–37. Retrieved from

http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med5&NEWS=N&AN=18270504

**#22** Kamau, M., Silove, D. M., Steel, Z., Catanzaro, R., Bateman, C. R., & Ekblad, S. (2004). Psychiatric disorders in an African refugee camp. *Intervention*, *2*(2), 84–89.

#175 Karunakara, U. K., Neuner, F., Schauer, M., Singh, K., Hill, K., Elbert, T., … Burnha, G. (2004). Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandans in the West Nile. *African Health Sciences*, *4*(2), 83–93. Retrieved from http://www.cabdirect.org/abstracts/20053191794.html?resultNumber=20&order=relevance&start=0&q=(“refugees”+OR+refugee+OR+“asylum+seekers”)+AND+(“mental+health”+OR+“depression”+OR+“anxiety”+OR+posttrauma*+OR+post-trauma*+OR+PTSD)

#225 Kim, G., Torbay, R., & Lawry, L. (2007). Basic health, women’s health, and mental health among internally displaced persons in Nyala Province, South Darfur, Sudan. *American Journal of Public Health*, *97*(2), 353–61. http://doi.org/10.2105/AJPH.2005.073635

#156 Lehmann, A. (2002). Safe abortion: a right for refugees? *Reproductive Health Matters*, *10*(19), 151–155.

#222 Lie, B. (2002). A 3-year follow-up study of psychosocial functioning and general symptoms in settled refugees. *Acta Psychiatrica Scandinavica*, *106*(6), 415–425.

#100 Meffert, S. M., & Marmar, C. R. (2009). Darfur refugees in Cairo: mental health and interpersonal conflict in the aftermath of genocide. *Journal of Interpersonal Violence*, *24*(11), 1835–1848. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med5&NEWS=N&AN=18945917

#129 Morof, D. F., Sami, S., Mangeni, M., Blanton, C., Cardozo, B. L., & Tomczyk, B. (2014). A cross-sectional survey on gender-based violence and mental health among female urban refugees and asylum seekers in Kampala, Uganda. *International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics*, *127*(2), 138–143. http://doi.org/10.1016/j.ijgo.2014.05.014

#172 Mueller, J., Schmidt, M., Staeheli, A., & Maier, T. (2011). Mental health of failed asylum seekers as compared with pending and temporarily accepted asylum seekers. *European Journal of Public Health*, *21*(2), 184–189. http://doi.org/10.1093/eurpub/ckq016

#165 Neuner, F., Onyut, P. L., Ertl, V., Odenwald, M., Schauer, E., & Elbert, T. (2008). Treatment of posttraumatic stress disorder by trained lay counselors in an African refugee settlement: a randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *76*(4), 686–694. http://doi.org/10.1037/0022-006X.76.4.686

#198 Neuner, F., Schauer, M., Karunakara, U., Klaschik, C., Robert, C., & Elbert, T. (2004). Psychological trauma and evidence for enhanced vulnerability for posttraumatic stress disorder through previous trauma among West Nile refugees. *BMC Psychiatry*, *4*, 34. http://doi.org/10.1186/1471-244X-4-34

#234 Neuner, F., Schauer, M., Klaschik, C., Karunakara, U., & Elbert, T. (2004). A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an african refugee settlement. *Journal of Consulting and Clinical Psychology*, *72*(4), 579–587. http://doi.org/10.1037/0022-006X.72.4.579

**#9** Onyut, L. P., Neuner, F., Ertl, V., Schauer, E., Odenwald, M., & Elbert, T. (2009). Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement -- an epidemiological study. *Conflict and Health*, *3*.

#237 Peltzer, K. (1999). Trauma and mental health problems of Sudanese refugees in Uganda. *The Central African Journal of Medicine*, *45*(5), 110–114. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med4&NEWS=N&AN=10746396

#146 Piwowarczyk, L. (2009). If I deliver the baby now. *The American Journal of Psychiatry*, *166*(7), 760–761.

#238 Rasmussen, A., & Annan, J. (2010). Predicting Stress Related to Basic Needs and Safety in Darfur Refugee Camps: A Structural and Social Ecological Analysis. *Journal of Refugee Studies*, *23*(1), 23–40. http://doi.org/10.1093/jrs/fep044

#191 Rasmussen, A., Katoni, B., Keller, A. S., & Wilkinson, J. (2011). Posttraumatic idioms of distress among Darfur refugees: Hozun and Majnun. *Transcultural Psychiatry*, *48*(4), 392–415. http://doi.org/10.1177/1363461511409283
#192 Rasmussen, A., Nguyen, L., Wilkinson, J., Vundla, S., Raghavan, S., Miller, K. E., & Keller, A. S. (2010). Rates and impact of trauma and current stressors among Darfuri refugees in Eastern Chad. *The American Journal of Orthopsychiatry*, *80*(2), 227–236. http://doi.org/10.1111/j.1939-0025.2010.01026.x
#117 Rees, B., Travis, F., Shapiro, D., & Chant, R. (2013). Reduction in posttraumatic stress symptoms in Congolese refugees practicing transcendental meditation. *Journal of Traumatic Stress*, *26*(2), 295–298. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=medl&NEWS=N&AN=23568415
#221 Roberts, B., Felix Ocaka, K., Browne, J., Oyok, T., & Sondorp, E. (2009). Factors associated with the health status of internally displaced persons in northern Uganda. *Journal of Epidemiology and Community Health*, *63*(3), 227–232. http://doi.org/10.1136/jech.2008.076356
# 7 Roberts, B., Damundu, E. Y., Lomoro, O., & Sondorp, E. (2010). The influence of demographic characteristics, living conditions, and trauma exposure on the overall health of a conflict-affected population in Southern Sudan. *BMC Public Health*, *10*. http://doi.org/http://dx.doi.org/10.1186/1471-2458-10-518
#205 Roberts, B., Damundu, E. Y., Lomoro, O., & Sondorp, E. (2009). Post-conflict mental health needs: a cross-sectional survey of trauma, depression and associated factors in Juba, Southern Sudan. *BMC Psychiatry*, *9*, 7. http://doi.org/10.1186/1471-244X-9-7
#162 Rutta, E., Williams, H., Mwansasu, A., Mung'ong'o, F., Burke, H., Gongo, R., … Qassim, M. (2005). Refugee perceptions of the quality of healthcare: findings from a participatory assessment in Ngara, Tanzania. *Disasters*, *29*(4), 291–309. http://doi.org/10.1111/j.0361-3666.2005.00293.x
#168 Sheikh, T. L., Abdulaziz, M., Agunbiade, S., Joseph, I., Ebiti, B., & Adekeye, O. (2015). Correlates of depression among internally displaced persons after post-election violence in Kaduna, North Western Nigeria. *Journal of Affective Disorders*, *170*, 46–51. http://doi.org/10.1016/j.jad.2014.08.050
#231 Sideris, T. (2003). War, gender and culture: Mozambican women refugees. *Social Science & Medicine (1982)*, *56*(4), 713–724.
#226 Sipsma, H. L., Falb, K. L., Willie, T., Bradley, E. H., Bienkowski, L., Meerdink, N., & Gupta, J. (2015). Violence against Congolese refugee women in Rwanda and mental health: a cross-sectional study using latent class analysis. *BMJ Open*, *5*(4), e006299. http://doi.org/10.1136/bmjopen-2014-006299
#28 Sossou, M. (2006). Mental-health services for refugee women and children in Africa: a call for activism and advocacy. *International Social Work*, *49*(1), 9–17 9p. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=106424510&site=ehost-live
#188 Tang, S. S., & Fox, S. H. (2001). Traumatic experiences and the mental health of Senegalese refugees. *The Journal of Nervous and Mental Disease*, *189*(8), 507–512.
#178 Vinson, G. A., & Chang, Z. (2012). PTSD symptom structure among West African war trauma survivors living in African refugee camps: a factor-analytic investigation. *Journal of Traumatic Stress*, *25*(2), 226–231. http://doi.org/10.1002/jts.21681
#125 Voelker, R. (2009). Mission to Chad pinpoints sexual violence. *JAMA*, *302*(5), 477–780. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med5&NEWS=N&AN=19654377
#58 Global mental health special issue. (2013). *International Health (RSTMH)*, *5*(1), 1–50. Retrieved from : http://www.cabdirect.org/abstracts/20133118895.html?resultNumber=3&order=relevance&q=("refugees"+OR+refugee+OR+"asylum+seekers")+AND+("mental+health"+OR+"depression"+OR+"anxiety"+OR+posttrauma*+OR+post-trauma*+OR+PTSD)+AND+(%

## Appendix K – Table 7: Tools used to screen/diagnose mental health disorders

Table 7: Tools used to screen/diagnose mental health disorders in the included studies

| Study ID | Tools used | Function | Validated? |
|---|---|---|---|
| **Bell, 2016** | Self-Report Questionnaire (SRQ-20) | Screen for CMD | Widely used, no mention of validation. |
| **Carta, 2013** | Short Screening Scale for DSM-IV PTSD | Screen PTSD according to DSM-IV guidelines | Yes, (pilot validation study in Burkina Faso) |
| | K6 Screening Scale | Screen and supports the Short Screening Scale | Validated in Burkina Faso. Slight changes were made to original tool |
| **Feyera, 2015** | Patient Health Questionnaire | Outcome measure of depression | Yes (in Ethiopia) |
| | Harvard Trauma Questionnaire (HTQ) | Measure exposure to traumatic events | Used adapted version of questionnaire. Not validated in region and local language |
| **Kamau, 2004** | Psychiatric nurse (DSM-IV based diagnosis) | Diagnose mental disorders | No: inter-rater validity not assessed |
| **Kinfu, 2014** | Goldberg's assessment checklist (GDST) → General Health Questionnaires (GHQ) | Screening of the most prevalent psychiatric disorders in PHC settings | Yes |
| **Onyut, 2009** | 34 Items Events Checklist | Identify extremely stressful and traumatic events | Developed by authors |
| | Posttraumatic Stress Diagnostic Survey (PDS) | Only self-report measure that assess all 6 criteria for PTSD (according to the DSM-IV) | Yes |
| | Hopkins Symptom Checklist 25 (HSCL 25) | Assisted self-report interview to assess possibility of co-morbid depression | Validated using Section E of CIDI |
| | Composite International Diagnostic Interview (CIDI) | Validate PDS (and section E of tool to validate HSCL-25) | Yes |
| **PHR, 2009** | Istanbul Protocol (IP) | International guidelines for documentation of torture and its consequences | No information |