ASSESSMENT OF GENERALIZED ANXIETY DISORDER AND COMMUNITY-BASED INTERVENTIONS AMONG REFUGEES IN PROTRACTED DISPLACEMENT IN URBAN SETUPS: CASE OF UMOJA REFUGEE COMMUNITY-BASED ORGANIZATION, NAIROBI, KENYA

by

Manishimwe Anne-Marie

(19-1515)

A thesis presented to the School of Applied Human Sciences

of

Daystar University

Nairobi, Kenya

MASTERS IN CLINICAL PSYCHOLOGY

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# APPROVAL

ASSESSMENT OF GENERALIZED ANXIETY DISORDER AND COMMUNITY-BASED INTERVENTIONS AMONG REFUGEES IN PROTRACTED DISPLACEMENT IN URBAN SETUPS: CASE OF UMOJA REFUGEE COMMUNITY-BASED ORGANIZATION, NAIROBI, KENYA

by

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In accordance with Daystar University policies, this thesis is accepted in partial fulfillment of requirements for the Masters degree in Clinical Psychology

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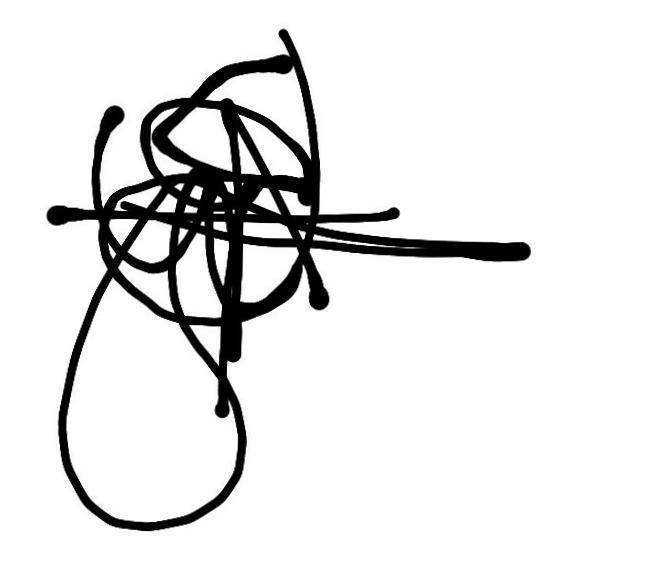
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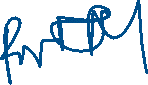


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# DECLARATION

ASSESSMENT OF GENERALIZED ANXIETY DISORDER AND COMMUNITY-BASED INTERVENTIONS AMONG REFUGEES IN PROTRACTED DISPLACEMENT IN URBAN SETUPS: CASE OF UMOJA REFUGEE COMMUNITY-BASED ORGANIZATION, NAIROBI, KENYA

I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit.



Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: 23/08/2023\_\_\_\_\_\_\_\_\_\_\_\_\_

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(19-1515)

# DEDICATION

I dedicate this work above all to the Most Triune God, and our Lady Help of Christian for the grace and providence; to my parents as a tribute to their altruism and selfless steps that have brought me this far; to my elder sister Iphigenie for her love, and special contribution to my life and education; and to all the Blueblood Siblings for the unwavering unity, love, and encouragement.

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LIST OF ABBREVIATIONS AND ACRONYMS

APA: American Psychiatric Association

CAM: Cognitive Avoidance Model

CBT: Cognitive-Behavioral Therapy

CBO: Community-Based Organization

CFA: Confirmatory Factor Analysis

CIDI: Composite International Diagnostic Interview

EFA: Exploratory Factor Analysis

GAD: Generalized Anxiety Disorder

GHQ-28: General Health Questionnaire-28

HSCL-25: Hopkins Symptoms Checklist-25

HTQ: Harvard Trauma Questionnaire

IDPs: Internally Displaced Persons

K (10): Kessler Psychological Distress Scale

MINI: Mini-International Neuropsychiatric Interview

NACOSTI: National Commission for Science, Technology, and Innovation

PHQ-9: Patient Health Questionnaire

PTSD: Post-Traumatic Stress Disorder

SPSS: Statistical Package for Social Sciences

UNHCR: The United Nations High Commissioner for Refugees

Umoja Refugee CBO: Umoja Refugee Community-based Organization

WHO: World Health Organization

ABSTRACT

This study aimed to assess the prevalence of Generalized Anxiety Disorder (GAD) and evaluate community-based interventions among refugees living in protracted displacement in urban setups. The research focused on the Umoja Refugee Community-Based Organization (CBO) in Nairobi, Kenya, guided by the Cognitive Avoidance Model (CAM) by Newman and Llera (2011) and the program-based program theory by Cheadle et al. (1978). The specific objectives were: (1) determining the prevalence of GAD among refugees at Umoja Refugee CBO, Nairobi, Kenya, (2) investigating the precipitating factors of GAD among these refugees, and (3) establishing the level of satisfaction with community-based interventions offered by Umoja Refugee CBO in the urban setup, Nairobi, Kenya. Using a descriptive survey research design, the study targeted youth and middle-aged individuals (18-44 years) who bear significant responsibilities and are at risk of experiencing higher generalized anxiety. The sample consisted of 215 individuals achieved by using Yamani (1967) formula and participants were selected using simple random sampling. Data was collected using a researcher-developed questionnaire and the GAD 7-item questionnaire. Validity was ensured through external or face validity, content validity, and construct validity. Reliability was established using the split-half method during pretesting. A pretest was conducted in a similar refugee population in Dagoretti North Sub-County, selecting 22 participants from the Kangemi area. Ethical clearance was sought from Daystar University Ethics Review Board and the National Commission for Science, Technology, and Innovation (NACOSTI). Data was analyzed using the Statistical Package for Social Sciences (SPSS), employing descriptive and inferential statistics. This study sought to provide valuable insights into the prevalence, causes, and level of satisfaction with community-based interventions for GAD among refugees in protracted displacement, contributing to the development of targeted and evidence-based mental health support programs in similar contexts. The study established findings and recommendations that will inform policy and practice aimed at improving the well-being of refugees.

CHAPTER ONE

# INTRODUCTION AND BACKGROUND TO THE STUDY

## Introduction

Refugees have been found to be among the most vulnerable populations globally, often experiencing extreme stress, trauma, and loss because of forced displacement (Bryant, Sackville, & Nicholson, 2014). The World Health Organization (2013) defines refugees as a vulnerable population that faces numerous challenges such as displacement, trauma, and exposure to conflict. These challenges can greatly affect the refugees' mental and physical health, which can eventually lead to the development of mental health disorders such as GAD.

According to the American Psychiatric Association (APA, 2013), GAD is a prevalent and debilitating disorder characterized by persistent and excessive worry and anxiety. It is a mental health condition that affects people from various cultural and ethnic backgrounds globally. Its symptoms include excessive and persistent worry about everyday life events and activities which can eventually cause significant impairment in daily functioning and the quality of life of affected individuals. The condition has been observed to be more prevalent among individuals who have experienced traumatic events and significant life stressors, such as refugees in protracted displacement (Bryant, Sackville, & Nicholson, 2014).

To understand the relationship between refugees and mental health challenges such as GAD, we need to first understand the concept of forced displacement which often also leads to protracted situations, especially in Africa. The United Nations High Commissioner for Refugees (UNHCR, 2021) defines forced displacement as the situation in which individuals are forced to flee their homes due to conflict, persecution, natural disasters, or other reasons, and cannot return due to continued danger. It is that compulsion to leave one's home, due to the threat of persecution, conflict, generalized violence, or human rights violations. In this definition key factors of coercion and the presence of threats or violence that force individuals to flee their homes and seek safety elsewhere have been highlighted.

This state of forced migration often leads to a state of protracted displacement, which is characterized by long-term displacement that lasts for years or even decades (UNHCR, 2019). Protracted displacement can result in a range of negative psychosocial effects, including increased stress, depression, and anxiety. Forced displacement is the genesis of refugees which cause people to flee their countries of origin in search of safety, security, and protection from another country other than your own. Research has also found that refugees are among the most vulnerable populations globally, often experiencing extreme stress, trauma, and loss because of displacement (Bryant, Sackville, & Nicholson, 2014). This is because the prolonged and uncertain nature of displacement often results in increased exposure to stressors, and a range of mental health problems, including GAD (Bryant, Sackville, & Nicholson, 2014).

According to the Umoja Refugee CBO’s website, Umoja Refugee CBO is a refugee-led initiative based in Kenya. It was established in Nairobi by refugees themselves with the aim to provide support and assistance to refugees, including access to basic needs, employment/income generating activities, education opportunities, and mental health services ("About Umoja Refugee CBO," n.d.). The Umoja CBO has developed several community-based interventions aimed at addressing the psychosocial impacts of displacement among refugees in Nairobi by providing support and services to refugees in the city. These interventions include access to mental health services, support for employment and education, and efforts to address the root causes of displacement. The level of satisfaction with these interventions in reducing the levels of GAD among refugees in Nairobi is not well understood, and this is the focus of the proposed study. Umoja Refugee CBO offers a range of programs aimed at improving the well-being and self-sufficiency of refugees, including mental health and psychosocial support (Umoja Refugee Community-based Organization, n.d.). This organization serves as an excellent case study for understanding the prevalence of GAD among refugees in a protracted displacement context and the impact of community-based interventions.

This study therefore aimed to assess the prevalence of GAD among refugees in protracted displacement situations and evaluate the refugees’ level of satisfaction with community-based interventions in reducing the symptoms of GAD. The study used Umoja Refugee CBO as a case study, by looking closely at its programs and services, and the impact they have on the well-being and mental health of refugees in Nairobi. The study also aimed to identify the key factors that contribute to the development of GAD among refugees in protracted displacement situations and to identify interventional strategies that can be used to mitigate its impact in urban setups.

## Background to the Study

The prevalence of GAD among refugees has been documented in several studies across the globe. According to the World Health Organization (WHO), the global prevalence of anxiety disorders, including GAD, is estimated to be around 7.3% (WHO, 2017). A systematic review conducted by Kwan et al. (2017) found that the prevalence of GAD among refugees’ ranges from 12% to 54%, with a median prevalence of 24%. The authors noted that the high levels of trauma exposure, social adversity, and uncertainty among refugees contribute to the high rates of GAD. Another systematic review of anxiety disorders reported a global anxiety prevalence between 10.6% and 16.6% (Somers et al., 2016).

Refugees in protracted displacement face numerous challenges that can negatively impact their mental health (United Nations High Commissioner for Refugees, 2018). The experience of displacement and the trauma associated with conflict, persecution, and violence can also increase the risk of developing anxiety disorders among refugees (Kazdaghli, Messaoudi, & Charfeddine, 2018). The lack of basic needs, such as food, shelter, and security, can also contribute to stress and anxiety among refugees in protracted displacement (Fazel et al., 2012). These challenges are similar to reports by the World Health Organization (WHO, 2021) that linked poverty and limited access to basic services as perpetuating factors of anxiety symptoms due to the struggle to meet the basic needs and adjust to unfamiliar living conditions. Similarly, McIntyre (2013) established that mental health disorders, including GAD, are prevalent among refugees and can significantly impact their quality of life. These findings are consistent with WHO (2021) report that established that poverty and lack of access to basic services are some of the root causes of increased anxiety among refugees which contribute to chronic stress, due to reduced social support, and compounding existing psychological distress.

These anxiety disorders are the most common mental health conditions among refugees and internally displaced persons (IDPs). The rationale around this has been associated with the prolonged and uncertain nature of displacement which leads to feelings of hopelessness, loss of control, and fear, which can eventually contribute to the development of anxiety disorders (Stein & Kisangani, 2009). A study by Pham et al. (2020) established that forced displacement was associated with higher levels of anxiety among refugees in Nairobi. The researchers used a cross-sectional study design and surveyed 1,077 urban refugees from various nationalities, including Somalia, South Sudan, and the Democratic Republic of Congo. The findings of the study demonstrated that the prevalence of mental health problems among urban refugees in Nairobi was high, with 43.9% of participants meeting the criteria for depression and 27.8% for post-traumatic stress disorder (PTSD).

The researchers also found that factors such as gender, income, and social support were associated with mental health problems among urban refugees. This study also established that refugees who had been displaced for longer periods of time were more likely to report symptoms of GAD, as well as those who had experienced violence, trauma, and other forms of abuse in their home countries, were more likely to experience anxiety. A similar study by Bhana et al. (2021) found that forced displacement and protracted displacement were associated with increased levels of psychological distress among refugees in Nairobi. The study used a qualitative research design and found that refugees often faced challenges such as limited access to basic needs, limited opportunities for employment and education, and feelings of hopelessness and despair. These challenges can lead to increased stress and anxiety levels and contribute to the development of mental health problems like GAD.

In addition to the direct effects of displacement, refugees in protracted displacement also face a range of other stressors, such as discrimination, lack of access to education and employment, and social isolation (Fazel et al., 2012). These stressors can have a significant impact on mental health, including increasing the risk of developing anxiety disorders. The impact of anxiety disorders among refugees in protracted displacement can be significant and long-lasting. Anxiety disorders can affect a person’s ability to function in daily life and can impact their physical health, employment, and relationships (Smith, 2020). Furthermore, the burden of anxiety disorders among refugees can also have a significant impact on communities and societies, reducing economic productivity and increasing healthcare costs (Stein & Kisangani, 2009).

Several studies have investigated the prevalence of GAD among refugees in protracted displacement globally, and the results indicate that GAD is a common mental health issue among this population. In a systematic review of 20 studies from different parts of the world, the prevalence of GAD among refugees in protracted situations was found to range from 6.2% to 51.0% (Kazdaghli, Messaoudi, & Charfeddine, 2018). The study also found that the prevalence of GAD was higher among refugees in urban areas compared to those in rural areas. In a study of Syrian refugees in Jordan, the prevalence of GAD was found to be 22.7% (Nasermoaddeli, Mohseni, & Ebrahimi, 2016). Another study of Iraqi refugees in Syria found a prevalence of GAD of 31.9% (Abdel-Khalek et al., 2010). Moussa, Abuzahra, and Abu-Elyounes (2009) conducted a study on Palestinian refugees in Lebanon and found a prevalence of GAD of 27.5%. A study on the same population in Turkey found that among Syrian refugees, 34.6% met the criteria for GAD (Yüksel et al., 2018). A study of Iraqi refugees in Jordan reported a prevalence of GAD of 33.3% (Al-Jahdali et al., 2018). A study conducted on Sudanese refugees in Chad also found a prevalence of GAD of 41.0%.

In the context of refugees in Nairobi, Kenya, forced displacement can have a significant impact on their mental health (Kwan et al., 2017). This is basically because Nairobi is home to a large refugee population, including refugees from neighboring countries such as Somalia and South Sudan, who have fled conflict and persecution in their home countries (Mousa et al., 2016). These refugees face a range of challenges in Nairobi, including limited access to basic needs like food, shelter, and healthcare, and limited opportunities for employment and education (Yüksel et al., 2018). This can lead to increased stress and anxiety levels and contribute to the development of mental health problems like GAD (Al-Jahdali et al., 2018). A similar study was conducted by Stein, Seedat, Metcalf, Heeringa, and Wagner (2008), who also examined Somali refugees in Kenya, and found a prevalence of 32.0% for GAD (Kazdaghli, Messaoudi, Charfeddine, & Abbar, 2015). Likewise, another study on Somali refugees in Kenya reported that 39.7% exhibited symptoms consistent with GAD (Mousa et al., 2016).

The evidence suggests that refugees are at high risk for GAD and that this mental health disorder is a significant concern for this population. Interventions, such as community-based programs, can play an important role in reducing the symptoms of GAD among refugees and improving their mental well-being. In conclusion, the results of the aforementioned studies indicate that GAD is a common issue among refugees in protracted displacement globally, with prevalence rates ranging from 6.2% to 51.0%. The results also suggest that refugees in urban areas may be at a higher risk of developing GAD compared to those in rural areas. This background established the need for further research to better understand the factors contributing to the high prevalence of GAD among refugees in protracted displacement and to develop effective interventions to support their mental health.

## Statement of the Problem

Urban refugee settings present unique challenges in addressing the mental health needs of refugees. In Kenya, there is a significant knowledge gap regarding the prevalence of GAD and the level of satisfaction with community-based interventions among refugees living in urban areas experiencing protracted displacement in urban setups. Existing research has highlighted the increased risk of mental health disorders, including GAD, among urban refugees (Miller & Rasmussen, 2017; Porter & Haslam, 2005), but there is limited understanding of the satisfaction levels of interventions tailored to their specific needs. This knowledge gap hampers the development of evidence-based strategies to support the mental well-being of this vulnerable population. Therefore, this study aimed to address this gap by assessing the prevalence of GAD and evaluating the level of satisfaction with community-based interventions provided by the Umoja Refugee Community-Based Organization in Nairobi. By doing so, the study sought to contribute to the development of targeted and effective interventions to improve the mental health outcomes of refugees in urban settings living in protracted displacement which would eventually provide valuable insights that can inform policy and practice, ultimately improving the well-being and quality of life for refugees in urban areas of Kenya.

## Purpose of the Study

The purpose of this study was to assess GAD and community-based interventions among refugees in protracted displacement in urban setups, using a case study of Umoja Refugee CBO, Nairobi, Kenya.

## Objectives of the Study

The broad objective of this study will be to assess GAD among refugees in protracted displacement and community-based interventions provided by the Umoja Refugee CBO, Nairobi, Kenya.

The specific objectives of the study were:

1. To determine the prevalence of GAD among Refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya
2. To investigate the precipitating factors of GAD among refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya
3. To establish the level of satisfaction with community-based interventions offered by Umoja Refugee CBO, to refugees in the urban setup, Nairobi, Kenya.

## Research Questions

1. What was the prevalence of GAD among Refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya?
2. What were the precipitating factors of GAD among refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya?
3. What was the level of satisfaction with community-based interventions offered by Umoja Refugee CBO, to refugees in the urban setup, Nairobi, Kenya?

## Justification of the Study

According to Bryden et al. (2018) mental health disorders are prevalent among refugees, and GAD is one of the most prevalent and debilitating disorders that can significantly impact their quality of life. The study first aimed at addressing the gap in the existing literature on GAD and use of Community based interventions to alleviate anxiety levels among refugees living in protracted situations in urban setups. Focusing on the context of Umoja Refugee CBO in Nairobi Kenya, the study sought to acknowledge the unique challenges of urban refugees and identify the level of satisfaction with community-based interventions to help urban refugees deal with GAD caused by several factors while bringing to light the situation and challenges of urban refugees in Nairobi, Kenya.

The rationale was basically to understand the prevalence of GAD among urban refugees and the role played by community interventions in alleviating GAD symptoms among urban refugees in the spirit of having a better understanding and thereafter draw recommendations geared towards development of targeted and culturally sensitive approaches to support mental wellbeing among urban refugees in protracted displacement especially those in urban setups. The findings of this study could inform policy and programming related to refugee assistance, enabling policymakers and humanitarian organizations to allocate resources to CBOs and design interventions that prioritize the mental health needs of refugees in urban setups. Additionally, this study could contribute to raising awareness about the mental health challenges faced by refugees, both within the community itself and among the broader public. Ultimately, this research has the potential to improve the overall well-being and resilience of refugees in protracted displacement and facilitate their successful integration into urban settings while taking care of mental health through active use and engagement in community-based interventions and resources.

## Significance of the Study

The results of this study would provide valuable information on the prevalence and impact of community-based interventions in reducing the symptoms of GAD among refugees in protracted displacement in urban settings (Seedat et al., 2009). By understanding the level of satisfaction of these interventions, the study could contribute to the development of evidence-based interventions that address the mental health needs of refugees and their families in Nairobi, Kenya, and other urban settings. This research would also contribute to the existing literature on the mental health of refugees and the impact of community-based interventions in reducing GAD symptoms.

Moreover, the study's outcomes were expected to offer crucial insights into the levels of GAD among refugees in protracted displacement in Nairobi, Kenya, and the level of satisfaction of community-based interventions in reducing these levels. The findings would help inform the development of evidence-based interventions aimed at improving the mental health of refugees in urban settings, ultimately benefiting not only the refugees themselves but also their families. Additionally, the study's results could provide valuable knowledge for future policy and practice in addressing the mental health needs of refugees in urban contexts. Overall, the study aimed to fill the existing gap in understanding mental health and the impact of community-based interventions by assessing GAD levels among refugees in protracted displacement in Nairobi, Kenya, and evaluating the level of satisfaction of community-based interventions provided by the Umoja CBO. The study would also contribute to academics by addressing a research gap, informing evidence-based practice, advancing scholarly discussions, and providing a foundation for future research in the field of mental health and community-based interventions for refugees in urban settings.

## Assumptions of the Study

The following will be the assumptions of the study:

1. Refugees in protracted displacement in Nairobi, Kenya were at risk of developing GAD.
2. Community-based interventions could reduce the symptoms of GAD.
3. The researcher would get the necessary authorization to collect data from the refugees.

Scope of the Study

The study was conducted in Nairobi, Kenya, and focused on refugees in protracted displacement who are members of the Umoja Refugee CBO. The study included a determined sample of adult refugees from Umoja Refugee CBO and was to assess their symptoms of GAD using the GAD-7 item questionnaire. The study also established the prevalence of GAD, explored the precipitating factors of anxiety disorders and the level of satisfaction with community-based interventions specific to Umoja Refugee CBO in the alleviation of GAD. The choice of Nairobi, Kenya as the study site was due to its significant population of refugees in protracted displacement, and the presence of the Umoja Refugee CBO, which provides community-based interventions. Focusing on this specific population allowed for a targeted examination of the mental health needs and experiences of refugees in urban settings, providing valuable insights into the level of satisfaction with community-based interventions and their impact on GAD symptoms. The utilization of the GAD-7 item questionnaire further strengthened the study's methodology, enabling the assessment of GAD symptoms in a standardized and validated manner. Overall, this scope allowed for a comprehensive exploration of the chosen topic, contributing to the understanding and improvement of mental health support for refugees in Nairobi, Kenya.

## Limitations and Delimitations of the Study

The principal limitation faced by the researcher during this study was the language barrier where the majority of the respondents could not sufficiently understand English and Kiswahili. The researcher’s multilingual abilities in Great lakes spoken language came in handy and she was able to interact with each of the respondents in their most preferred languages which included Kinyarwanda, Kinyamulenge, Kirundi, Kiswahili and French. The respondents from Uganda and Sudan and South Southan were comfortable with English.

The study also relied solely on self-reported data for diagnosing GAD and the study was primarily quantitative using a structured questionnaire, however the respondents wanted to express more details explicitly especially on the questions of precipitating factors, hence the researcher rendered them a listening ear and hence recommended future studies that are qualitative in nature to explore further the topic may introduce biases and inaccuracies which may not accurately reflect the presence of the disorder.

The respondents who were interviewed in English had a challenge in understanding the items of GAD and the rating. Hence the researcher established that the reliance on self-reported data for GAD symptoms could introduce biases and inaccuracies and therefore dedicated time to ensure the respondent understands each item of the tool and explained the meaning of the rating to ensure the respondent accurately rates themselves appropriately. By acknowledging the above limitations and taking steps to address them, the researcher was able to enhance the quality and validity of the study findings since respondents felt comfortable and understood the process well.

## Definition of Key Terms

Community-Based Interventions: Interventions designed and implemented at the community level to address specific health or social problems (WHO, 2022). This same definition was used in this study.

Generalized Anxiety Disorder: A mental health disorder characterized by excessive and persistent worry and anxiety about multiple life events and activities (APA, 2013). The same definition applied to this study.

Protracted Displacement: A situation in which refugees remain in displacement for an extended period of time, often for several years or longer. This study considered a refugee in protracted displacement as anyone who had been forcibly displaced out of their country of origin for 5 years or more.

Refugees: Individuals who have been forced to flee their homes due to conflict, persecution, or violence (UNHCR, 2021). This definition was adopted as such in this study.

Single mother: According to Collins English Dictionary, a single mother refers to a woman who has a dependent child or dependent children and who is widowed, divorced, or unmarried. In terms of marital status, this study used the term to refer to a woman raising children alone, and who do not necessarily belong to the category of widowed, divorced or separated.

## Chapter Summary

This chapter covered the background to the study, statement of the problem, purpose, objectives, research questions, rationale, and significance of the study. It also looked at possible limitations and delimitations of the study. Key terms were also defined. The next chapter focuses on the literature on GAD and its prevalence among refugees in a protracted displacement context and examines the various community-based interventions that have been implemented in other similar settings, and their impact on the well-being and mental health of refugees.

# CHAPTER TWO

# LITERATURE REVIEW

## Introduction

Kumar (2011) defined a review of literature as a process through which a researcher dives for the purposes of mastering and examining the research problem. This chapter presents the theories that guided this study, a review of related literature according to the study objectives, an empirical review of research done in various places, a literature summary, and a conceptual framework.

## Theoretical Framework

This study was informed by two theories: The cognitive avoidance model (CAM) by Newman and Llera (2011), and the program-based program theory by Cheadle et al. (1978). The CAM suggests that individuals with anxiety disorders, such as GAD, tend to engage in cognitive avoidance strategies to cope with distressing thoughts and emotions (Newman & Llera, 2011). This theory informed the study by providing a framework to understand how cognitive avoidance may contribute to the symptoms of GAD among refugees in protracted displacement in urban settings. It guides the exploration of cognitive avoidance as a potential precipitating factor for anxiety disorders in this specific population.

On the other hand, the program-based program theory focused on the level of satisfaction of community-based interventions. This theory emphasizes the importance of designing interventions based on a thorough understanding of the target population's needs, resources, and contextual factors (Cheadle et al., 1978). It informed the study by providing guidance on how to assess the impact of community-based interventions provided by the Umoja Refugee CBO on the reduction of GAD symptoms. The theory helps in evaluating the alignment between the program theory of Umoja Refugee CBO's interventions and their actual outcomes in addressing anxiety disorders among refugees in Nairobi, Kenya.

These two theories complemented each other in the study. The CAM sheds light on individual-level factors contributing to GAD symptoms, while the program-based program theory focuses on the level of satisfaction of community-based interventions. Together, they provide a comprehensive framework for understanding the interplay between individual cognitive processes and the impact of community-based interventions on reducing GAD symptoms among refugees (Newman & Llera, 2011; Cheadle et al., 1978). By incorporating both theories, the study gained a deeper understanding of the underlying mechanisms and level of satisfaction of interventions, enabling the development of more targeted and evidence-based approaches to support the mental health needs of refugees in urban settings.

### Cognitive Avoidance Model

This theory was fronted by Newman and Llera (2011) and argues that people with a GAD (GAD) have a positive view of worry and that despite being aware of chronic emotionality that results from worry, they still engage in it. According to this model, people experiencing GAD experience negative emotional contrasts, and worry is actively used to create and at the same time maintain a regular and lasting emotional state. As such, having a negative emotional state assists such a person to remain prepared emotionally for any likely negative experiences in the future in order to avoid an abrupt change in their damaging emotion.

This is to say that people with GAD remain vigilant and anxious, and whenever something bad happens, they do not experience a sharp rise in their damaging emotions, because they have already created one. As such, they create avoidance by having a negative or damaging emotional contrast. According to Rashtabari and Saed (2020), the model assumes that it raises the chances of experiencing robust emotional contrast. Accordingly, positive emotional contrast emerges when a person gets worried about a negative event or experience in the future. However, against their expectation, the experience or event fails to happen, or something positive happens on the contrary. In such a case the person’s emotions shift from a negative state to a positive or neutral state.

One strength of the CAM is that it highlights the role of cognitive processes in anxiety. It suggests that anxious individuals engage in cognitive avoidance as a means of coping with their anxiety, which can provide temporary relief but ultimately maintain or exacerbate their symptoms (Brosschot et al., 2006). Some studies like LaFraniere and Newman (2019a) have indicated that a large number of the worries of people with GAD mostly fail to materialize and the 85-91% of the worries in different studies turned out to be untrue. It is thus possible that experiencing a contrary state of positive emotion in such individuals is quite high and so they are likely to experience relief after an anxious state. Conversely, if the individual experienced the feared outcome, there will be no negative emotional contrast since they were emotionally prepared for the aversive outcome. Putting into consideration that a person will experience an aversive contrast after a feared outcome, or they will experience therefore becomes a vicious cycle. Therefore, according to this model, emotional regulation for persons with GAD keeps them in negative emotional states through worry in order to avoid drastic changes in aversive feelings and emotions.

Newman and Llera (2011) have also come up with three fundamental principles. The first is that the major fear for persons with GAD is a drastic change in aversive emotions or experiences (Wells (2006). As opposed to previous frameworks, CAM suggests that worry aids in avoiding a sharp rise in unpleasant feelings or emotions. In addition, people with GAD find it hard to regulate emotions and they believe themselves to be incapable of the same. They are therefore very reluctant to use adaptive strategies for regulating emotion as noted by Kerns et al. (2014). Furthermore, intolerance to uncertainty tends to make people with GAD remain or find it hard to let go of worry and thus they keep themselves in negative emotional states as reported by Ranney et al. (2018).

The second principle of CAM is that worry makes and retains negative emotions. According to Llera and Newman (2014), this has been evidenced in many studies that have found a difference between worry period and non-worry periods makes and retains aversive emotions, as well as physiological stimulation. This is therefore considered the most unique aspect of the CAM model compared to other models that define GAD.

The third principle argues that people experiencing GAD experience passing positive emotions, which is often known as positive emotional contrast. Since people with GAD evade negative emotions, their positive emotions for them are undesirable. They thus attempt to make and retain an aversive and long-term emotional state. Consequently, such people will be invulnerable to aversive emotional contrast events since they have maintained their negative emotional state. Llera and Newman (2017) argue that according to CAM, GAD individuals do not evade every positive emotion, so passing emotional states become pleasant to such individuals. It is important, therefore, to note that despite having the passing pleasant emotions, GAD persons still retain their negative emotional states so as to prevent falling into negative experiences.

The theory that generally proposes that individuals with anxiety tend to avoid situations or thoughts that trigger their anxiety by engaging in cognitive avoidance, such as distraction or suppression of thoughts (Brosschot, Gerin, & Thayer, 2006), has been criticized for focusing on the causes of chronic responses to stress rather than the causes of mechanisms responsible for inhibition of normal stress response (Carleton et al., 2012). The authors have however argued that intolerance of uncertainty (IU) is a cross-diagnostic construct, and it adds to developing and maintaining anxiety disorders (Rashtbari & Saed, 2020). The theory also presents additional weaknesses in explaining anxiety disorders. One weakness of the Cognitive Avoidance Model is that it does not account for the fact that some individuals with anxiety may engage in cognitive processing and rumination, rather than avoidance, which can maintain or exacerbate their symptoms (Olatunji, Wolitzky-Taylor, & Sawchuk, 2010). In fact, some evidence suggests that cognitive avoidance may be more characteristic of depression than anxiety (Watkins, Moulds, & Mackintosh, 2005).

Another weakness of the Cognitive Avoidance Model is that it does not consider the role of physiological arousal in anxiety. Some research suggests that physiological reactivity may contribute to the development and maintenance of anxiety symptoms (Barlow, 2002). Therefore, it is possible that cognitive avoidance is not the only or primary mechanism underlying anxiety. Furthermore, the CAM has been criticized for being overly simplistic and failing to consider the complex interplay between cognitive, emotional, and behavioural factors in anxiety (Olatunji et al., 2010). For example, some individuals with anxiety may engage in avoidance behaviours rather than cognitive avoidance, which can also maintain their symptoms.

In conclusion, while the CAM provides some insights into the cognitive processes underlying anxiety, it has some limitations in explaining the full complexity of this disorder. Despite its weakness, this theory was selected for this study because it, first, addresses the dependent variable which is the levels of GAD. It has also been found suitable for the study because it explains the nature of GAD according to the experiences of persons experiencing the disorder. This model, therefore, emphasizes the importance of addressing cognitive processes in the treatment of anxiety disorders. Furthermore, the CAM has been supported by empirical research. Studies have found that cognitive avoidance is associated with higher levels of anxiety and that interventions that target cognitive avoidance can lead to reductions in anxiety symptoms (Aldao & Nolen-Hoeksema, 2012; Mennin et al., 2005).

This research provided support for the CAM and suggested that it is a useful framework for understanding and treating anxiety disorders. Moreover, the CAM proved to have practical implications for the treatment of anxiety disorders. It suggests that interventions that target cognitive avoidance, such as cognitive-behavioral therapy (CBT), may be effective in reducing anxiety symptoms (Mennin et al., 2005). CBT aims to help individuals identify and modify maladaptive thought patterns and has been shown to be effective in treating various anxiety disorders (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012).

### Community-Based Program Theory

The community-based program theory is a theory that was developed by Cheadle et al. (1978). The theory states that community is the unity of identity and the right central point for any health and safety programs and that the community can be a target as well as a catalyst for change (Nilsen, 2004). The theory is composed of seven principles and the first is focusing on the community. This is informed by the realization that people live in and are shaped by both the physical and social environment in which they live. This is because of the shared knowledge, behaviors, attitudes, and skills which reflect their experiences.

The second principle is the participation of community members in which community involvement defines their health or safety problem and finds a common solution. According to Bracht et al. (1990), the voluntary social progress that is part of the formal and informal activities in the community leads to an organized change and improvement in the life of the community, services together with resources. In addition, community participation fosters identity and responsibility for any program from the members and its acceptance. Thirdly, intersectoral collaboration is the third principle of this theory which is explained as the collaboration among different sectors within the community and organizations for common goals (Butterfoss et al., 1996). Sometimes, collaboration is considered a community coalition and is composed of individuals that represent different teams within that community. Accordingly, community members are motivated to work together to achieve a common interest.

The fourth principle is the principle of substantial resource requirements which states that the challenges that are involved in setting and maintaining effective community-based health and safety programs are considerable and need a considerable resource investment (Nilsen, 2006). This is to say that for any community intervention, resources are unavoidable because it helps to counter any challenges. The fifth principle argues for multifaceted interventions in which different behavioral, as well as environmental interventions address different risk factors at different levels of the community. This helps in maximizing the effect of the program across the community because it takes advantage of the combined efforts that are assumed to exist across different parts of the program.

The last principle is the population outcome where any intervention applied in a community setup is expected to achieve the goals of the entire community in terms of health and safety. Therefore, as Nilsen (2004) argues, a population outcome is a goal achieved, and the approach points to different interventions in the direction of the general population within the community rather than to high-risk individuals. In a refugee setup, helping the entire refugee community would bring better outcomes than helping the needy refugees would not bring.

Community-based program theory is a methodology that has several strengths. Firstly, it involves community members in the development and implementation of programs, which ensures that the program is tailored to the specific needs of the community and is more likely to be successful (Kretzmann & McKnight, 1993). Secondly, it takes a holistic approach to program design by addressing not just the immediate problem but also the underlying factors that contribute to it. This approach results in more effective programs that address the root causes of the problem (Schein, 2010).

Thirdly, community-based program theory emphasizes sustainability by involving community members in the program's design and implementation. This approach ensures that the program is more likely to continue after initial funding runs out (Ramsay et al., 2009). Fourthly, it encourages program evaluation to ensure that programs are effective and to identify areas for improvement. This approach ensures that programs are continually refined to meet the changing needs of the community (Rossi et al., 2004).

Lastly, community-based program theory empowers community members to take control of their own lives and to become active participants in improving their communities. This approach leads to greater community ownership of programs and a greater sense of responsibility for their success (Zimmerman & Rappaport, 1988).

This theory has also been criticized because it only applies where a community is organized, and members have the interests of the community at heart. One weakness is that community-based programs may not be accessible to all individuals with GAD. For example, individuals with limited mobility or transportation may not be able to attend in-person programs, while individuals with limited internet access may not be able to participate in online programs (Kretzmann & McKnight, 1993). Another weakness is that community-based programs may not be able to provide the same level of expertise and specialization as traditional mental health services. While community-based programs can provide valuable support and resources, they may not be able to offer the same level of individualized care as a licensed mental health professional (Schein, 2010).

Additionally, program evaluation can be challenging in community-based programs, particularly if there are limited resources or expertise available for evaluation. This can make it difficult to determine the level of satisfaction of the program and to identify areas for improvement (Rossi et al., 2004).

Finally, community-based programs may not be able to address all the underlying factors that contribute to GAD, particularly if these factors are structural or systemic in nature. For example, community-based programs may not be able to address issues such as poverty or discrimination, which can contribute to mental health problems (Ramsay et al., 2009).

Community mobilization, which is the major method of bringing people together in community-based programs can only occur if members share common interests. Studies that have tested this theory also have found that findings are insufficient to make firm conclusions on the effects of cooperation at community-level outcomes. As much as this theory has several weaknesses, it is found to be useful because it elevates the power of community intervention since it has far-reaching effects compared to individual intervention, especially in high-risk populations. This theory was found to be in line with the independent variable which the researcher sought to measure against generalized anxiety because of different precipitators and proved that community-based programs are key in bringing about lasting and meaning contributions to the mental health of the community in general.

## General literature review

## Prevalence of GAD among Refugees

GAD is a chronic condition characterized by excessive worry and fear that is not linked to any particular event or situation (Betts et al., 2022). It is a debilitating condition that impairs the quality of life and functioning of individuals who suffer from it. Anxiety disorders are one of the most common mental health conditions experienced by refugees and individuals in protracted displacement. It is estimated that up to 30% of refugees suffer from an anxiety disorder at any given time (Kaur et al., 2020). The prevalence of GAD among refugees and individuals in protracted displacement varies greatly depending on the population, migration history, and socio-economic context. A study by Kirmayer et al., (2011) indicated that immigrants to Canada usually have lower mental health disorders including general anxieties mainly due to screening done to foreigners before being admitted into the country.

Another study conducted by Schlechter et al., (2021) indicated elevated anxiety compared to the general public among refugees and foreigners. A study on elucidation of mental health disorders among Rohingya refugees in Malaysia by Kaur et al., (2020) reported that 41% of all 200 participants had developed general anxiety disorder and the overall prevalence of GAD rate was at 12.4%. Haller et al., (2014) also conducted an in-depth review of general anxiety prevalence among world populations and reported a prevalence between 4.1% and 13.7%, a prevalence lower than the prevalence reported in this study. In the developing world, racial and ethnic discrimination were pronounced and significantly increased anxiety levels from mild to moderate and severe (Georgiadou et al., 2018).

In a study conducted among Somali refugee women in a humanitarian setting, Hossain et al. (2020) found that the overall prevalence of anxiety disorders was 33.2%. Shide (2020) and numerous other studies also established higher mental health needs and disorders among women than men (Kaur et al., 2020; Pumariega et al., 2015). These findings indicate that refugees and individuals in protracted displacement experience higher rates of GAD compared to the general population. Studies have also found that the prevalence of GAD is higher among refugees and individuals in protracted displacement who have experienced trauma, such as war and violence, as well as displacement-related stress (Hossain et al., 2020).

In a separate study among Somali adolescent refugees, Ellis et al. (2008) found that those who experienced more trauma and perceived more discrimination were more likely to suffer from GAD. Similarly, a systematic review and meta-analysis conducted among African migrants found that those who had experienced traumatic events were more likely to suffer from GAD (James et al., 2022). Kirmayer et al. (2021) reported that general anxiety disorders are higher among younger people than older people and highly educated and skillful individuals were found to have lower anxiety compared to individuals with only basic education and without any skills (Salami et al., 2019).

The prevalence of GAD also varies depending on the duration of displacement. In a study conducted among Somali refugee women, Hossain et al. (2020) found that the prevalence of GAD was significantly higher among those who had been in displacement for more than five years. Several other studies done without special circumstances of wars and conflicts reported very low prevalence of general anxiety disorder (Ahmad et al., 2018; Haller et al., 2014; Martín-Merino et al., 2009; Ruscio et al., 2017; Spitzer et al., 2020.). A study done by Georgiadou et al., (2018) on mental distress among Syrian refugees in Germany, reported that 13.5% of all respondents had moderate to severe GAD. This means when individuals experience extended periods of displacement, such as refugees facing protracted displacement, there is a higher likelihood of them developing GAD. The implication is that the prolonged disruption and instability associated with displacement can contribute to an elevated risk of developing this specific anxiety disorder.

Finally, studies have shown that refugees and individuals in protracted displacement are more likely to suffer from GAD if they have poor social support networks or are socially isolated (Shide, 2021). In a study among Somali refugees in Kenya, Im et al. (2020) found that those with more social support had lower levels of GAD. Similarly, Betts et al. (2022) found that refugees who had better social relationships with their host communities were less likely to suffer from GAD.

## Precipitating Factors of GAD among Refugees

## *Exposure to Violence*

Exposure to violence is one of the main precipitating factors of GAD among refugees in protracted displacement. According to James et al. (2022), exposure to violence can have serious psychological and physical effects on individuals, leading to a variety of mental health problems, such as GAD. The authors suggest that refugees in protracted displacement are particularly vulnerable to violence due to the physical and psychological effects of displacement, such as poverty, discrimination, and lack of access to resources, which can make them more susceptible to abuse. Furthermore, Mölsä et al. (2016) suggest that violence exposure may also be a factor in the development of GAD among refugees in protracted displacement due to the long-term effects of traumatic experiences.

Studies conducted on Somali adolescent refugees established that exposure to violence can have serious psychological and physical effects, leading to a variety of mental health problems, such as GAD (Ellis et al., 2008). The authors suggest that these adolescents are particularly vulnerable to violence due to the physical and psychological effects of displacement, such as poverty, discrimination, and lack of access to resources. Hossain et al. (2020) suggest that for Somali refugee women in Kenya, exposure to violence was associated with a higher prevalence of GAD, suggesting that violence exposure is a contributing factor to GAD in this population. The authors suggest that the experience of violence is a traumatic experience that can lead to long-term psychological effects, such as GAD. The authors also suggest that the experience of violence can be compounded by the experience of displacement, which can further increase the risk of developing GAD among refugees.

A study by James et al. (2022) also suggested that African migrants are exposed to violence, which can contribute to the development of GAD. The authors suggest that this is particularly true for refugees in protracted displacement, as they are exposed to a greater number of violent incidents and may have a limited capacity to cope with the psychological effects of these incidents. Furthermore, Shide (2021) suggests that violence exposure is a significant risk factor for GAD among urban refugees in Nairobi, Kenya. The author suggests that the experience of violence can lead to long-term psychological effects, such as GAD, and that these effects can be compounded by the experience of displacement.

*Poverty and Deprivation*

Poverty and deprivation have been found to be major factors associated with mental health problems among refugees in protracted displacement. Studies have indicated that poverty and deprivation can lead to increased levels of stress, anxiety, and depression among refugees (Ullah et al., 2023). This is due to the fact that poverty and deprivation can lead to financial difficulties, lack of access to basic services, and social isolation. In addition, refugees may also experience economic insecurity and lack of access to adequate housing, food, and healthcare, which can further exacerbate the psychological distress experienced by refugees. Studies have found Community-Based Interventions to be helpful in combating the mental health needs of refugees (Salami et al., 2019).

Studies have also suggested that poverty and deprivation can lead to an increased risk of post-traumatic stress disorder (PTSD) and other mental health issues among refugees. For instance, Rousseau and Frounfelker (2019) found that refugee children who were exposed to poverty and deprivation were more likely to develop PTSD than those who were not. Similarly, Ellis et al. (2008) found that Somali adolescent refugees who were exposed to poverty and deprivation were more likely to develop depression and anxiety. Moreover, poverty and deprivation can also lead to increased feelings of hopelessness and helplessness among refugees, which can further exacerbate their mental health issues. Hossain et al. (2020) found that refugee women who were exposed to poverty and deprivation were more likely to experience anxiety and PTSD than women who were not. This is likely since poverty and deprivation can lead to feelings of powerlessness, which can further exacerbate the psychological distress experienced by refugees.

Furthermore, poverty and deprivation can lead to an increased risk of violence and exploitation among refugees. Studies have indicated that refugees who are exposed to poverty and deprivation are more likely to experience physical and sexual violence than those who are not (Im et al., 2020). This is because poverty and deprivation can lead to an increased vulnerability to exploitation and abuse, which can further exacerbate the mental health issues experienced by refugees.

*Prolonged Displacement*

Studies conducted in the African region have shown that prolonged displacement is associated with a high risk of GAD among refugee populations (Hossain et al., 2020; Betts et al., 2022). For instance, a study conducted among Somali refugee women in a Kenyan humanitarian setting found that the duration of displacement was significantly associated with higher levels of GAD (Hossain et al., 2020). Similarly, a study examining the social cohesion and refugee-host interactions in East Africa found that the longer the duration of displacement, the more likely refugees were to suffer from GAD (Betts et al., 2022).

In addition, research conducted in Nairobi, Kenya has highlighted the association between prolonged displacement and GAD among refugees in the city (Shide, 2021). A study conducted on the prevalence of anxiety, depression, and post-traumatic stress disorder among African migrants in Nairobi, Kenya found that prolonged displacement was significantly associated with higher levels of GAD (James et al., 2022). This suggests that prolonged displacement may be a key factor in the prevalence of GAD among refugee populations in the city. Furthermore, research conducted in Nairobi, Kenya has demonstrated the role of prolonged displacement in the development of GAD among urban refugees (Shide, 2021). A qualitative study conducted among urban refugee women in Nairobi, Kenya found that prolonged displacement was associated with a higher risk of developing GAD (Shide, 2021). The study found that prolonged displacement was associated with a lack of access to basic services and social networks, which can lead to feelings of isolation and helplessness and, in turn, to the development of GAD (Shide, 2021).

*Traumatic Experiences*

The effects of traumatic experiences on refugee mental health have been widely reported. Trauma is one of the major factors leading to the development of GAD among refugees, particularly in protracted displacement. A study by Hossain et al. (2020) revealed that a high proportion of Somali refugee women in a Kenyan refugee camp had experienced traumatic events such as violence, displacement, and loss of loved ones. The study also found that these experiences were significantly associated with the development of PTSD, depression, and anxiety.

Similarly, a study by Im et al. (2020) revealed that exposure to traumatic experiences was a significant risk factor for comorbidity of PTSD, depression, and anxiety in Somali refugees in Kenya. The study also showed that these traumatic experiences were associated with significant impairments in functioning, including social functioning, and was associated with an increased risk of poor mental health.

The effects of traumatic experiences on anxiety symptoms have also been studied in other parts of the world. A study by Kaur et al. (2020) conducted in Malaysia revealed that exposure to violence was associated with an increased risk of anxiety symptoms in Rohingya refugee children. Similarly, a study by Ellis et al. (2008) conducted in the United States revealed that traumatic experiences were associated with an increased risk of GAD symptoms in Somali adolescent refugees. These studies have highlighted the importance of addressing traumatic experiences to reduce the risk of anxiety symptoms in refugee populations.

In addition, it has been suggested that prolonged displacement is a major risk factor for the development of GAD symptoms in refugees. A study by Betts et al. (2022) conducted in East Africa revealed that prolonged displacement was associated with an increased risk of GAD symptoms in refugee populations. The study also showed that prolonged displacement was associated with increased risk of depression and PTSD symptoms. These findings suggest that prolonged displacement can lead to an increased risk of anxiety symptoms in refugee populations.

## Level of Satisfaction with Community-Based Interventions

Given the prevalence of GAD among refugees in protracted displacement, there is a need to evaluate the level of satisfaction of community-based interventions offered by the Umoja Refugee CBO in Nairobi, Kenya. Community-based interventions refer to interventions that are designed to improve the quality of life of a community and to reduce the levels of stress and anxiety in the community. Community-based interventions are often provided by non-governmental organizations such as Umoja Refugee CBO. Community-based interventions are often designed to target specific risk factors associated with GAD, such as unemployment and social isolation. For example, Umoja Refugee CBO provides vocational training to refugees to increase their employability and decrease the risk of unemployment. Umoja also provides social support groups which provide an opportunity for refugees to interact and build social networks, which can reduce the risk of social isolation.

Studies have shown that community-based interventions can be effective in reducing the levels of GAD among refugees in protracted displacement. For example, a study conducted by Roy et al. (2020) in India found that a community-based intervention program, which provided vocational training and social support groups, was associated with a reduction in the levels of GAD among refugees. Similarly, a study conducted by Rana et al. (2020) in Bangladesh found that a community-based intervention program was associated with a reduction in the levels of anxiety among refugees. Additionally, a study conducted in Kenya by Mwai et al. (2020) found that refugees who participated in a community-based intervention program offered by the Umoja Refugee CBO experienced a reduction in the levels of GAD. The intervention program included vocational training, social support groups, and psychoeducation. The study found that the intervention was effective in reducing the levels of GAD among refugees in protracted displacement.

## Empirical literature review

Several studies have been conducted across the globe on anxiety and related studies across the globe and they have established different findings in terms of the causes, prevalence, and interventional strategies used to alleviate anxiety-related symptoms among the refugee population. Different authors used different research methodologies and some findings are contradictory while others established similar results and others established research and knowledge gaps as far as anxiety disorders and related interventions are concerned.

In the United States, a study by Kira et al. (2014) conducted a cross-sectional study with a convenience sample of 204 Somali refugees living in the United States. Participants completed self-report measures of GAD (GAD) symptoms and trauma exposure. The researchers analyzed the data using descriptive statistics and logistic regression to identify factors associated with GAD. The study found that 61.4% of the participants met the criteria for GAD. The researchers also found that being female, being unmarried, having a lower level of education, and having experienced more traumatic events were significantly associated with an increased risk of GAD among Somali refugees. These findings suggest that interventions aimed at preventing and treating GAD among refugees from Somalia should consider gender, marital status, education, and trauma exposure.

Birman, Tran, and Weinstein (2008) also conducted a qualitative investigation of the experiences of Southeast Asian refugees in the United States with depression and anxiety symptoms. Their study used a qualitative research design, which allowed for an in-depth exploration of the experiences of the study participants. However, the study did not use a standardized diagnostic tool to assess participants' mental health symptoms, which may limit the accuracy of the findings. The authors used semi-structured interviews to collect data on participants' experiences with depression and anxiety symptoms. Some of the pitfalls of this study relate to the research methodology, more specifically the sample size and the data collection instruments. The authors of this study used interviews as data collection tools for qualitative research, however, they did not report on the reliability or validity of the interview protocol used in the study.

The study also used a very small sample size of 23 Southeast Asian refugees who had been resettled in the United States. While the study provided important insights into the experiences of this population, the sample size was relatively small and may not have been representative of all refugee populations with anxiety symptoms. Birman et al. (2008) study provides important insights into the experiences of Southeast Asian refugees with depression and anxiety symptoms. However, the study did not provide information on the mode of community interventions provided to anxiety refugees. The authors highlighted the importance of culturally sensitive interventions that consider the unique experiences of refugee populations.

Additionally, to the small sample size, the study presents more limitations such as the use of self-report data, and the lack of information on the mode of community interventions provided to anxious refugees. This has therefore helped in designing a study representative sample with reference to a clear formula to ensure that the results of the study can be generalized, and conclusions are drawn with regard to GADs among refugees in urban refugees.

Kazour et al. (2017) conducted a study assessing anxiety disorder among refugees in France. The study aimed to assess the prevalence and factors associated with anxiety disorders among Syrian refugees in France. The researchers used a cross-sectional design and recruited 330 adult Syrian refugees who were resettled in France through a systematic sampling approach. They used the Mini-International Neuropsychiatric Interview (MINI) to diagnose anxiety disorders and collected data on sociodemographic and migration-related variables.

The study found that the prevalence of anxiety disorders among Syrian refugees in France was 32.1%. The most common type of anxiety disorder was GAD (21.2%), followed by social anxiety disorder (6.7%) and panic disorder (5.5%). The study also found that the female gender, younger age, being unmarried, and having a history of mental illness were significant predictors of anxiety disorders among Syrian refugees in France. Overall, the study highlights the high prevalence of anxiety disorders among Syrian refugees in France and the importance of providing appropriate mental health services to this vulnerable population.

Comparing Birman et al. (2008) and Kazour et al. (2017), we can conclude that both conducted studies on the prevalence of anxiety disorders among refugee populations, but the two studies present key differences that we can be keen on and established how different aspects of research methodology can affect the overall results. One of the major differences is the study populations. Birman et al. (2008) conducted their study among Southeast Asian refugees living in the United States, while Kazour et al. (2017) conducted their study among Syrian refugees resettled in France. These populations may differ in terms of their cultural backgrounds, the reasons for their migration, and their experiences as refugees, which could impact the prevalence and nature of anxiety disorders.

Another difference is the sample size. Birman et al. (2008) recruited a sample of 101 refugees, while Kazour et al. (2017) recruited a larger sample of 337 refugees. The larger sample size in the Kazour et al. study may provide more statistical power and allow for greater generalizability of findings. Both studies used diagnostic tools to assess anxiety disorders, but they differed in the specific tools used. Birman et al. (2008) used a culturally adapted version of the Composite International Diagnostic Interview (CIDI) to assess PTSD and major depressive disorder, while Kazour et al. (2017) used the Mini-International Neuropsychiatric Interview (MINI) to assess anxiety disorders. These differences may impact the prevalence rates reported.

In terms of findings, Birman et al. (2008) reported that 46% of their sample met the criteria for PTSD, while 56% met the criteria for major depressive disorder. Kazour et al. (2017) reported that 32.1% of their sample met the criteria for anxiety disorders. While both studies reported high rates of psychological distress among refugee populations, the specific rates and types of disorders differed. In South Asia, several studies were conducted on the Rohingya refugees in Cox’s Bazar with the aim of assessing anxiety disorders. A study published in the Journal of Affective Disorders in 2021 found that the prevalence of GAD among Rohingya refugees in Cox's Bazar, Bangladesh was 43.3%. The study used a sample of 402 Rohingya refugees and assessed them using the GAD-7 (GAD-7) scale. A similar study was previously published in the Journal of Immigrant and Minority Health in 2020 which found that the prevalence of GAD among Rohingya refugees in Cox's Bazar was 49.1%. The study used a sample of 441 Rohingya refugees and assessed them using the Hopkins Symptoms Checklist-25 (HSCL-25).

Interestingly, another study published in the Asian Journal of Psychiatry in 2019 found that the prevalence of anxiety disorders, including GAD, among Rohingya refugees in Cox's Bazar was 38.3%. The study used a sample of 241 Rohingya refugees and assessed them using the Mini-International Neuropsychiatric Interview (MINI). These The studies discussed by the author suggest that Rohingya refugees in Bangladesh have a high prevalence of GAD and are consistent with previous research indicating that refugees are at increased risk for mental health problems due to exposure to traumatic events, displacement, and acculturation stress (Islam et al., 2021; Sakib et al., 2020; Kabir et al., 2019).

These findings highlighted the need for mental health services and support tailored to the specific needs of this population, including interventions that address trauma, provide coping skills, and support community integration. The importance of addressing the social determinants of mental health, such as poverty, discrimination, and limited access to healthcare, which can exacerbate mental health problems were also noted (Islam et al., 2021; Sakib et al., 2020; Kabir et al., 2019). The 3 publications on the Rohingya refugees underscored the importance of addressing the mental health needs of refugees, including Rohingya refugees in Bangladesh, and the need for further research on effective interventions and strategies to support their well-being.

Similar studies were also conducted in other parts of the world bringing in more details and input to the literature on anxiety disorder and more diverse assessment tools. Steel, Mares, Newman, and Blick (2019) conducted a prevalence study on asylum seekers in Australia. A study by Slewa-Younan, Guajardo, Heriseanu, Hasan, Naser, and Mond (2012) in New Zealand found that the prevalence of high levels of anxiety symptoms among refugees and asylum seekers in South Australia was 40%. The study used a sample of 143 refugees and asylum seekers and assessed them using the Kessler Psychological Distress Scale (K10).

Later, a similar study was published with findings consistent with Slewa-Younan et al. (2012). The latter found that the prevalence of anxiety disorders among refugees resettled in Australia was 45.7% (Steel, Mares, Newman, & Blick, 2019). The study used a sample of 142 refugees and assessed them using the MINI International Neuropsychiatric Interview (MINI). These results were published some three years after Shrestha, Silove, Ksiezopolska-Orlowska, and Toussaint (2016) reported a relatively alarming rate of anxiety among refugees in found that the prevalence of anxiety disorders among Afghan and Kurdish refugees in Melbourne, Australia was 37.8%. The study used a sample of 150 refugees and assessed them using the Harvard Trauma Questionnaire (HTQ) and the General Health Questionnaire-28 (GHQ-28).

These studies used different assessment tools to measure anxiety, which may limit the comparability of the results. For instance, Steel et al. (2019) used a meta-analysis of studies that used different diagnostic tools, while Shrestha et al. (2016) used the HTQ and GHQ-28, and Slewa-Younan et al. (2012) used the K10. However, despite the different research methods utilized in the said studies, there is a common factor merging all of them: they all provide valuable insights into the prevalence of anxiety disorders among refugees resettled in Australia. However, it is important to note that those studies had some limitations that may affect the generalizability of the findings. Additionally, to the different assessment tools, the sample sizes in the studies were relatively small, ranging from 142 to 150 participants. As such, the findings may not be representative of the wider refugee population in Australia. Those studies did not provide a comprehensive understanding of the factors contributing to anxiety among refugees in Australia. While they identified the prevalence of anxiety disorders, they did not explore the specific experiences, circumstances, or stressors that may be contributing to anxiety among this population.

In Africa, studies on GAD among refugees were equally conducted. Assefa et al. (2019) used a cross-sectional design to assess the prevalence of GAD among refugees in Ethiopia. They recruited a sample of 1,110 refugees and assessed GAD using the Mini International Neuropsychiatric Interview (MINI). They found that 7.9% of the participants had GAD. The study's main limitation was the potential for underreporting due to the stigma associated with mental health in Ethiopian culture. Tesfaye et al. (2020) also studies GAD among Eritrean refugees in Ethiopia and found that the prevalence of GAD was 31.4%, with factors such as exposure to traumatic events and limited social support associated with higher rates of GAD.

Stewart et al. (2015) used a cross-sectional design to validate screening tools for depression and anxiety disorders in a primary care population in Malawi. They recruited a sample of 5,678 individuals and assessed GAD using the Hospital Anxiety and Depression Scale (HADS). They found that 7.4% of the participants had GAD. The study's main limitation was its reliance on screening tools rather than clinical diagnosis. Onyut et al. (2009) found that the prevalence of GAD (GAD) among refugees in Uganda was 31.3%, with factors such as exposure to traumatic events and poor living conditions associated with higher rates of GAD. Abiola et al. (2021) also assessed the prevalence of GAD among refugees in Nigeria and found that it was 47.4%, with exposure to traumatic events and limited access to mental health services associated with higher rates of GAD. Tesfaye and colleagues (2020) conducted a cross-sectional study among Eritrean refugees in Ethiopia using the GAD-7 to assess anxiety. The study had a small sample size (N=197) and relied on self-report measures, which may be subject to bias. The findings showed a high prevalence of anxiety (46.2%) among the refugees, with significant associations between anxiety and factors such as female gender, being single, and having experienced trauma.

Yakob et al. (2019) conducted a cross-sectional study among Sudanese refugees in Egypt using the PHQ-9 and GAD-7 to assess depression and anxiety. The study had a small sample size (N=107) and relied on self-report measures, which may be subject to bias. The findings showed a high prevalence of anxiety (62.6%) and depression (71.0%) among the refugees, with significant associations between anxiety and factors such as gender and length of stay in Egypt. Duko et al. (2019) on the other hand conducted a cross-sectional study among Somali refugees in Ethiopia using the PHQ-9 and GAD-7 to assess depression and anxiety. The study had a small sample size (N=220) and relied on self-report measures, which may be subject to bias. The findings showed a high prevalence of anxiety (53.6%) and depression (52.3%) among the refugees, with significant associations between anxiety and factors such as gender, age, and educational status.

In East Africa, a record handful of studies have been conducted. Okello and colleagues (2013) conducted a cross-sectional study among refugees in Uganda using the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist-25 to assess anxiety and depression. The study had a large sample size (N=1,431) and used validated instruments for assessment, but the study design was limited by its cross-sectional nature, which precluded causal inferences. The findings showed a high prevalence of anxiety (48.3%) and depression (46.6%) among the refugees, with significant associations between anxiety and depression and demographic factors such as gender and age.

In Rwanda, a prevalence study of GAD was conducted among Congolese refugees in Rwanda and a prevalence of 34.7% was established (Kamaliddin et al., 2020). The study sample consisted of 351 Congolese refugees, with a mean age of 34.5 years and a standard deviation of 11.5. The sample was slightly more female (54.7%) than male (45.3%). Participants had been living in Rwanda for an average of 22.8 months, and the majority lived in urban settings (84.6%). The study participants had fled from conflict and violence in the eastern Democratic Republic of Congo and were residing in refugee camps and urban areas in Rwanda.

In Kenya, a study by Osman et al. (2021) used a cross-sectional design to assess the prevalence of GAD among Somali refugees in Kenya. The study used a sample of 317 refugees and assessed GAD using the GAD-7 scale. They found that 20.4% of the participants had GAD. The study's main limitation was its reliance on self-reported data, which may have been influenced by social desirability bias. "Prevalence and risk factors for anxiety and depression among Somali refugees in Kenya" by Abdi A. and colleagues (2016). This study aimed to assess the prevalence and risk factors for anxiety and depression among Somali refugees in Kenya. The results showed that 58% of the refugees had anxiety symptoms, and the risk factors for anxiety included female gender, being a victim of torture or violence, and having low social support.

The prevalence and correlates of anxiety disorders among refugees and asylum seekers in Kenya were studied by Musau et al. (2018). This study aimed to determine the prevalence and correlation of anxiety disorders among refugees and asylum seekers in Kenya. The results showed that the prevalence of anxiety disorders was 14%, and the factors associated with anxiety included being female, experiencing trauma, and having a low level of social support. Another study by Abubakar et al. (2016) on Somali refugees compared the prevalence of anxiety, depression, and post-traumatic stress disorder (PTSD) among Somali refugees in Kenya and in Somalia. The results showed that the prevalence of anxiety was 47% among refugees in Kenya and 32% among refugees in Somalia. The risk factors for anxiety included female gender, being a victim of violence, and having a low level of social support.

In conclusion, the various studies highlight the importance of assessing and addressing psychological distress among refugee populations. A key common limitation among the several reviewed studies is the use of cross-sectional designs, small sample sizes, and reliance on self-report measures. However, they all provide important insights into the high prevalence of anxiety among refugees across the world and more so in Africa and highlight the need for mental health services and support for this vulnerable population. The takeaway from the reviewed studies is that study findings were interpreted in the context of the specific populations and assessment tools used in each study.

The present study shared the same limitation of using a small sample size, however, the population characteristics and the study objectives were achieved since the selected sample has a high probability of producing valid and reliable results due to the case used for the study. The target population was dynamic in terms of Nationalities, a representative sample size was carefully selected, and an assessment tool that has proven to be valid and reliable based on several studies that have utilized GAD-7 as their assessment tool (Spitzer et al., 2006).

## Conceptual Framework

The independent variable was community-based interventions while the dependent variable is GAD as shown in figure 2.1. In this study, it was hypothesized that community-based interventions help the refugees to minimize generalized anxiety by addressing the precipitating factors. The community selected interventions were vocational skills, psychological interventions, provision of basic needs and education or training, provision of job opportunities and talent nurturing. If the community interventions were effective therefore, the levels of GAD would go down helping the refugees to lead a normal life.

Dependent Variable Independent Variable

Prevalence of GAD

-Physical symptoms

-Psychological symptoms

-Social withdrawal

Community-Based Interventions

-Vocational skills

-Psychological interventions

-Provision of basic needs

-Education/training

-Job opportunities

-Talent nurturing

Precipitating factors

-Traumatic experiences

-Lack of basic needs

-Lack of permanent residence

-Inaccessibility to sustainable socioeconomic opportunities

Intervening Variable

*Figure 2. SEQ Figure \\* ARABIC 1: Conceptual Framework*

Source: (Author, 2023)

## Discussion

The study literature sought to assess GAD and community-based interventions among refugees in urban setups by bringing to light the existing literature and the research gap. The variables of this study were as follows as portrayed in Figure 2.1, the independent variable was the community-based interventions which included group therapy, psychoeducation, material support (training), and physical activities. The dependent variable was GAD, which is characterized by feelings of anxiety, interpersonal relations, and reduced personal performance. The study aimed to investigate how community-based interventions relate to the occurrence and impact of GAD among refugees. By assessing the existing literature and identifying research gaps, the study sought to understand whether and to what extent these interventions influence the prevalence and severity of GAD symptoms in urban refugee populations. The study intended to explore further whether community-based interventions have a positive impact on reducing GAD symptoms, improving interpersonal relations, and enhancing personal performance among refugees in urban settings. By shedding light on the relationship between these variables, the study aimed to provide insights into the level of satisfaction with community-based interventions in addressing GAD among urban refugees with the intention that the knowledge gathered could inform the development and implementation of targeted interventions, and support programs to alleviate anxiety symptoms, enhance social well-being, and promote better overall outcomes for refugees in urban settings.

## Chapter Summary

This chapter provided an overview of the literature on the prevalence of GAD among refugees, the precipitating factors associated with GAD, and the level of satisfaction with community-based interventions in addressing GAD among refugees. The literature suggests that GAD is a common mental health disorder among refugees and that exposure to violence, poverty and deprivation, prolonged displacement, and traumatic experiences are associated with an increased risk of developing GAD. Studies also suggested that psychosocial interventions can be effective in reducing the symptoms of GAD among refugees.

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# CHAPTER THREE

# RESEARCH METHODOLOGY

## Introduction

This chapter outlines the methodology used in this study which includes the research design, variables, location of the study, the study target population, the sampling technique and sample size. The chapter also explains in detail the research instrument that was used, its reliability and validity, the pretesting exercise, and the data collection process. In the end, the method of data analysis is also provided and explained along with the logistical and ethical considerations of the study.

## Research design

Creswell (2014) defined a research design as a plan or strategy that outlines how a researcher intends to conduct a study to answer a specific research question or hypothesis. This involves making decisions regarding the research methodology, data collection methods, data analysis techniques, and other important aspects of the study. For this specific study, the researcher used a descriptive survey research design. According to Sillman, Smyth, and Christian (2014), a descriptive survey research design is a quantitative research method that involves collecting data from a sample of individuals using standardized questionnaires or interviews. The aim of this design was to obtain a representative sample of a population and use the data collected to draw conclusions about the population. A standardized questionnaire was therefore used to assess GAD and community-based interventions among refugees in protracted displacement in urban set-ups using a case of Umoja Refugee CCBO in Nairobi, Kenya.

## Study Site

The study was conducted in Riruta Sub-County which is in Dagoretti South Constituency in Nairobi County. Riruta is a residential area located in the Dagoretti South Constituency of Nairobi, Kenya (Kamau, 2017). It is situated approximately 9 kilometers southwest of Nairobi's central business district. Riruta is bounded by other Nairobi suburbs such as Kilimani to the east, Ngando to the south, and Kawangware to the west. The area is home to a diverse population, including refugees from neighboring countries with the majority being those from Burundi, Rwanda, the Democratic Republic of Congo (DRC), South Sudan, Ethiopia, and a few from Somalia (UNHCR, n.d.).

Riruta also hosts several centers and NGO field offices that provide shelter, food, medical, psychosocial support, and other basic needs to refugees. Many refugees in Riruta face challenges such as poverty, lack of access to healthcare and education, and discrimination (UNHCR, n.d.). Nevertheless, the refugees in Riruta have formed communities-based initiatives and support networks that help them navigate these challenges and maintain a sense of belonging in their new homes. This location was chosen because the main offices of the Umoja Refugee CBO are in this area. Still, many of the refugees live around the area and can be accessed conveniently when they attend their services.

## Target Population

A study target population refers to the specific group of individuals that a study or intervention is designed to address or affect. According to Creswell (2014), the target population is "the larger group to which the researcher would like to generalize the research findings." This study targeted 2015 refugee beneficiaries as of 2021 who attend the Umoja Refugee CBO in Kawangware, Riruta Sub-County of Nairobi - Kenya.

Inclusion and Exclusion criteria

Out of a population of 2015 refugees, 1123 were children below 18 years, 512 adults over 45 years of age, 380 were youth and middle-aged people between 18 - 44 years. This study targeted the latter category due to the responsibilities that surround them like getting jobs, having a family, and providing for parents and younger siblings where necessary putting them at risk of experiencing higher generalized anxiety. In this organization, the refugees visit the center where they are provided with psychological support, and material support and they engage in activities which help them deal with their daily stressors and anxieties.

This population was selected because it is the key beneficiary of the organization and so they need to understand their experiences with the services. In addition, they come from different countries including the Democratic Republic of Congo (DRC), Rwanda, Burundi, South Sudan, and Ethiopia (Umoja Refugee, 2021). The selected population, originating from countries such as the Democratic Republic of Congo, Rwanda, Burundi, South Sudan, and Ethiopia, is vulnerable to GAD due to several factors. These include forced displacement, exposure to violence and trauma, experiences of loss and grief, socioeconomic challenges, and cultural and linguistic barriers. These factors contribute to heightened anxiety levels and increase the risk of developing GAD among this population. Understanding their experiences with the organization's services is crucial for identifying their specific needs and developing effective interventions to address their anxiety-related concerns.

## Sampling Technique

Neuman (2013) referred to sampling technique as the process of selecting a subset of individuals or units from a larger population to be studied in a research project. Sampling is a key component and is equally important as the research design. In this study, the researcher used a simple random sampling technique to give each member of the population an equal chance of being selected for the study. Different refugees who visit the centre were included in the study based upon the inclusion and exclusion criteria. Everyone who frequented the Umoja Refugee CBO had an equal chance of forming the sample size. This method was selected for this study because it has been found to be the most unbiased and representative, as it minimizes the risk of selection bias since everyone is given equal chance to participate. This method proved to be easy to implement and required minimal knowledge of the population, making it a convenient and efficient sampling method.

The sample obtained through simple random sampling resulted in a representative sample that accurately reflected the population characteristics, which increased the external validity of the study. Additionally, the statistical analysis of data obtained through simple random sampling is generally straightforward, as it is based on probability theory. This allowed the use of statistical tests that require assumptions of randomness and independence, which increases the robustness and reliability of the study results (Lohr, 2019). The researcher established that this method gave the participants an equal chance to be selected which was free from bias and therefore proved to be a good method to draw proper generalizations at the end of the study.

*Table 3.1: Population distribution*

|  |  |  |
| --- | --- | --- |
| Sr No. | Category by age | Frequency |
| 1 | <18 years | 1123 |
| 2 | 18-44 years | 380 |
| 3 | >45 years | 512 |
|  | Total | 2015 |

This study targeted the second category due to the responsibilities that surround them like getting jobs, having a family, and providing for parents and younger siblings where necessary putting them at risk of experiencing higher generalized anxiety.

## Sample Size

Mugenda and Mugenda (2013) defined sample size as "the number of individual cases selected from a population to constitute a sample." This refers to the number of participants or units that are included in a study or survey. A study sample size is a key component of the research design since it has the capacity to affect the generalizability and statistical power of the study. A good sample should be one that is representative of the study population and enables meaningful statistical analysis.

This study utilized a sample size of 215 participants that were calculated with the use of the Yamane (1967) formula to provide data for the study. The Yamane formula was selected because it is suitable for smaller populations below 10000. The calculation of how the sample size was achieved is shown below.

n = N/1+(N)e2

Where n = desired sample size

N = the target population

e = the margin of error (usually 0.05)

Therefore 380/1+ (380)0.052 = 380/1+380 (0.0025) = 194.8

Adding a 10% drop out rate will give a working sample size of 215. Therefore, the working sample size will be 215 refugees.

## Data Collection Instruments

A researcher’s developed questionnaire

The study used a researcher's developed structured questionnaire to collect data from the participants. A questionnaire is easy to administer and collects large volumes of data within a short time. This informed the choice of the questionnaire in collecting data from the refugees. The questionnaire was organized into sections in line with the study’s objectives. The researcher used a standardized questionnaire incorporated in the researcher’s developed questionnaire to measure GAD. The self-constructed tool was scored using a Likert scale for responses to the items. It basically had four sections which included participants' socio-demographics, the prevalence of GAD, the precipitating factors of GAD, and the level of satisfaction with different interventions provided by Umoja Refugee CBO for refugees. The socio-demographics were multiple choice questions, while the levels of GAD used a standardized assessment tool.

GAD 7-item questionnaire (GAD-7)

The GAD-7 item questionnaire is a tool that is used to measure the levels of GAD. It has 7 items that require a response in 4 levels (Not at all=0, several days=1, more than half the days=2, and nearly every day=3). These questions respond to how a person has been bothered by the problems listed in the past two weeks. A low score indicates low levels of GAD while a high score indicates high levels of GAD. The lowest possible score is 0 and the highest possible score is 21, so a score of 0-4 is minimal anxiety, 5-9 is mild anxiety, 10-is 14 moderate anxiety and 15 and above is severe anxiety.

## Validity and Reliability

*Validity*

The validity of a tool is the capacity to measure what it purports to measure. In order to ensure validity, the researcher will make use of three types of validities which include external or face validity, content and construct validity. External validity was achieved using expert opinions from the supervisors and peers. Construct validity was achieved by adopting a standardized tool as well as an extensive literature review. In addition, the researcher constructed a data collection tool that was consistent with the study topic and objectives as well. On the other hand, content validity was achieved through a thorough and extensive literature review as well as expert opinion of my supervisors and a statistician.

*Reliability*

Reliability is the internal consistency of a tool such that it can be replicated in different populations. GAD-7 was found to have a high level of reliability during a confirmatory factor analysis. According to a review of studies on the GAD-7, several studies have demonstrated the validity of the GAD-7 in assessing symptoms of GAD. For example, Beard et al. (2011) conducted a study to evaluate the psychometric properties of the GAD-7 scale in a diverse psychiatric sample which included individuals with various anxiety and mood disorders. Their findings demonstrated that GAD-7 had a good internal consistency, with a Cronbach’s alpha coefficient of 0.92 which is indicative of high reliability.

Similarly, other researchers also conducted an Exploratory Factor Analysis (EFA) on a random sample of approximately 600 patients at intake. The EFA resulted in a clear one-factor solution, suggesting that all items in the GAD-7 scale loaded onto a single factor. However, when the researchers performed a Confirmatory Factor Analysis (CFA) after intake, they found that the CFA showed a poor fit of the data. This indicates that the one-factor structure derived from the EFA did not adequately fit the observed data in the CFA. The CFA, however, showed a poor fit of data. When the items assessing somatic symptoms were correlated, a good fit of CFA was realized. Overall, the study findings indicated that while the EFA initially suggested a one-factor structure for the GAD-7 scale, the CFA revealed that additional considerations, such as correlating specific items, were necessary to achieve a good fit with the observed data in a mixed clinical population. This showed excellent internal consistency and a one-factor structure in a mixed clinical population (Johnson, Miller, & Miller, 2019).

To ensure reliable data was collected during the study, the researcher used the split-half method to collect data. In this method, correlations of the two halves of the tool produced high correlation coefficients. This was done during the pretesting of the tool in order to ensure its reliability during the actual study.

## Pretesting

According to Mugenda and Mugenda (2013), a pretest is conducted to test the feasibility and level of satisfaction of a research design and to identify any potential problems that may arise in the main study. The purpose of a pretest for this study was to evaluate the research instruments before launching the full-scale study. The pretest helped to refine the research questions, identification of the language barrier and potential sources of bias and provided valuable insights into the study population. A pretest was conducted in Dagoretti North subCounty, specifically in the Kangemi area which hosts refugees with similar situational, geographical, and demographic characteristics as the study site. Accordingly, a total of 10 participants were interviewed during the pretest exercise.

## Data Collection Procedures

To collect data, the researcher obtained the requisite permits and authorizations from the Daystar University Ethics Review Board and the National Commission for Science, Technology, and Innovation (NACOSTI). During the actual data collection, the researcher first introduced herself to the administration of the Umoja Refugee CBO, specifically the Executive Director of the CBO to be permitted to access the study target population. Once permitted, the researcher proceeded to introduce herself to the participants. The researcher explained the purpose of the study, and all the ethical procedures of the study. The researcher made it clear that the study is purely academic, and results would not be used for any other purposes not specified. The researcher similarly explained the risks and benefits of participation. It was clarified to the participants that participation is purely voluntary however, participation was going to contribute to the body of knowledge and hence possibility to improve the services and interventions tailored for refugees in urban setups as far as mental health is concerned. The researcher further allowed those who wished to participate to proceed by responding to the researcher’s developed standard questionnaire. The participants had about 20-25 minutes to respond to the questionnaire.

## Data analysis

Data collected for this study was quantitative in nature and was subjected to descriptive and inferential analysis. Statistical Package for Social Sciences (SPSS) was used to analyze the collected data. Descriptive statistics including percentages, and frequencies were used to illustrate categorical data variables while continuous data variables were illustrated by mean and standard deviations. Two sample independent t-test and one way analysis variance were used to determine statistical significance at 95% confidence intervals. Generalized anxiety disorders’ precipitating factors and perceptions regarding community-based interventions were determined by use of weighted or aggregated means against statement means. Whenever a statement mean is greater than weighted mean the statement was regarded a success while the opposite applied.

## Ethical Considerations

Ethical considerations in research refer to the principles and guidelines that ensure that the rights, dignity, and welfare of human participants in research are protected. Ethics focuses on the application of ethical standards in the planning of the study, data collection and analyses, dissemination, and results usage (Mugenda, 2008). This study adhered to the ethical principles guiding the use of human participants in research such as confidentiality, informed consent, anonymity and the right to withdraw from the study among others were observed.

To ensure ethical research, the researcher obtained authorization from the Directorate of Research and Graduate Studies of Daystar University. This enabled the researcher to get clearance from the university’s Ethics Review Board which facilitated the research permit from NACOSTI. Prior to commencing data collection, the researcher attained the required legal and ethical clearances as set by the university and government of Kenya regarding research protocols through the Ministry of Science and Technology. During the research, the researcher ensured that the participants were informed on the purpose, harms, and benefits of research and their freedom to participate or withdraw from it at any time without any form of compulsion. Respondents were assured of confidentiality during and after data collection. Informed consent was obtained from each respondent before administration of the questionnaire to the participant.

The participants were informed of anonymity and the use of the findings. The data was collected using digitized questionnaires, administered by the researcher and the data would be transmitted to a secure database on kobotoolbox repository. The data was downloaded by the researcher for cleaning, tidying and analysis. To ensure the stability of the respondents after the interview, the researcher provided a brief counselling session to the respondents who were triggered by the research questions and referred for further counseling to those who scored severe levels of GAD. The data is security kept in a protected file in case it may be needed for further reference or research, and then it will be destroyed after a period of one year.

## Chapter Summary

This chapter outlined the research methodology that was used in this study, including the research design, target population, location of the study, sampling and sampling techniques, data collection instruments, methods of data collection and data analysis procedures, and ethical considerations. The next chapter concentrates on data presentation, analysis, and interpretation of results.

# CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

## Introduction

The present chapter focuses on the presentation, analysis, and interpretation of the study results. The data collected for this study was mainly quantitative and was subjected to descriptive and inferential analysis. SPSS was used to analyze the collected data. Analyzed data will be presented using charts and tables.

## Data Presentation, Analysis, and Interpretation of Results

### Response Rate

The study aimed to assess GAD among refugees in protracted displacement within urban setups, focusing on the Umoja Refugee Community-Based Organization in Nairobi, Kenya. The research utilized a sample size of 215 participants, determined using the Yamani formula. However, the questionnaire could only be administered to 170 respondents, resulting in a response rate of approximately 79%. This response rate indicates that a significant proportion of the intended participants engaged in the study, providing valuable insights into the prevalence of GAD and the effectiveness of community-based interventions among refugees at the Umoja Refugee CBO. Dillman, Smyth, and Christian (2014) recommended researchers to strive for a response rate of around 70% to make appropriate evaluations, formulate hypotheses and make recommendations. While a higher response rate might have enhanced the study's generalizability, the obtained data is meaningful enough to address the research objectives.

*Table 4.1: Response Rate*

|  |  |  |
| --- | --- | --- |
| Questionnaires | Number | Percent |
| Estimated Sample size | 215 | 100% |
| Questionnaires Administered and filled | 170 | 79% |
| Complete and Useable Questionnaires | 170 | 79% |

## Socio-demographic Information

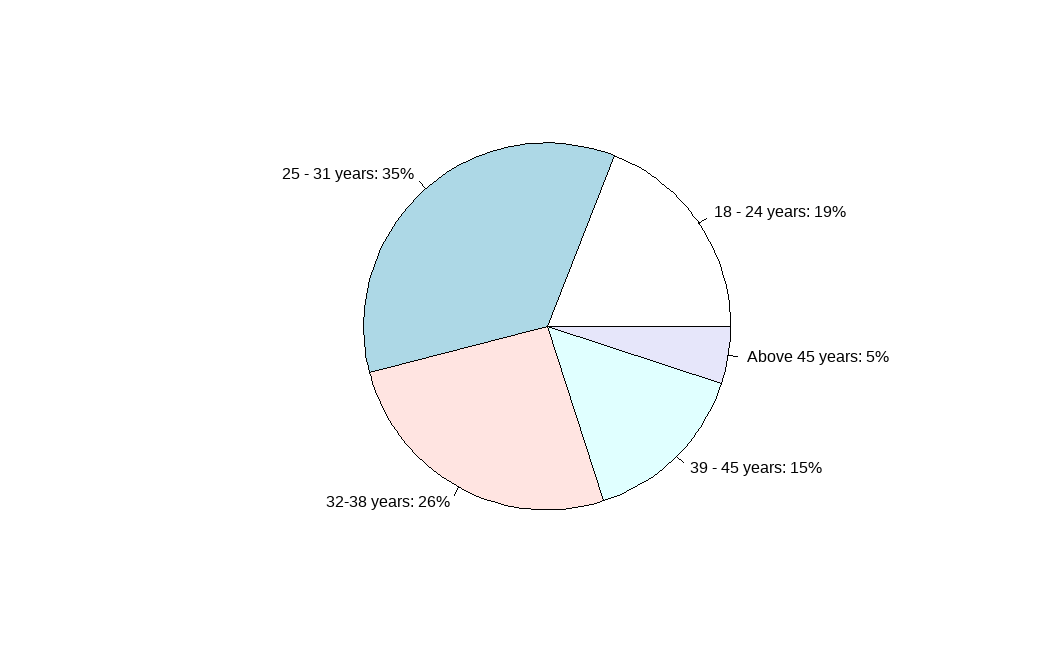
The illustrated below provides the distribution in percentage proportions of socio- demographic characteristics of respondents frequenting the Umoja refugee CBO.

*Table 4.2: Socio-demographic Characteristics*

| Socio-demographic Characteristics | Frequency (%) |
| --- | --- |
| Age Groups |  |
| 18 - 24 years | 32 (19%) |
| 25 - 31 years | 60 (35%) |
| 32-38 years | 44 (26%) |
| 39 - 45 years | 25 (15%) |
| Above 45 years | 9 (5.3%) |
| Gender of Respondents |  |
| Female | 105 (62%) |
| Male | 65 (38%) |
| Marital status of respondents |  |
| Single | 60 (35%) |
| Married | 80 (47%) |
| Widowed | 3 (1.8%) |
| Single mother | 19 (11%) |
| Separated | 8 (4.7%) |
| Education Level of Respondents |  |
| No formal education | 11 (6.5%) |
| Primary | 27 (16%) |
| Secondary | 98 (58%) |
| Tertiary | 34 (20%) |
| Respondents Occupation |  |
| Casual worker | 57 (34%) |
| Employed | 19 (11%) |
| No income generating activity | 26 (15%) |
| Self-employed | 24 (14%) |
| Small-scale business | 32 (19%) |
| Unemployed | 12 (7.1%) |
| Respondents’ Residence period |  |
| 2 - 5 years | 40 (24%) |
| 6 - 9 years | 59 (35%) |
| Over 10 years | 71 (42%) |
| Nationality of Respondents |  |
| Burundian | 69 (41%) |
| Congolese | 35 (21%) |
| Rwandese | 58 (34%) |
| South Sudanese | 5 (2.9%) |
| Sundanese | 1 (0.6%) |
| Ugandan | 2 (1.2%) |

### Age group of the respondents

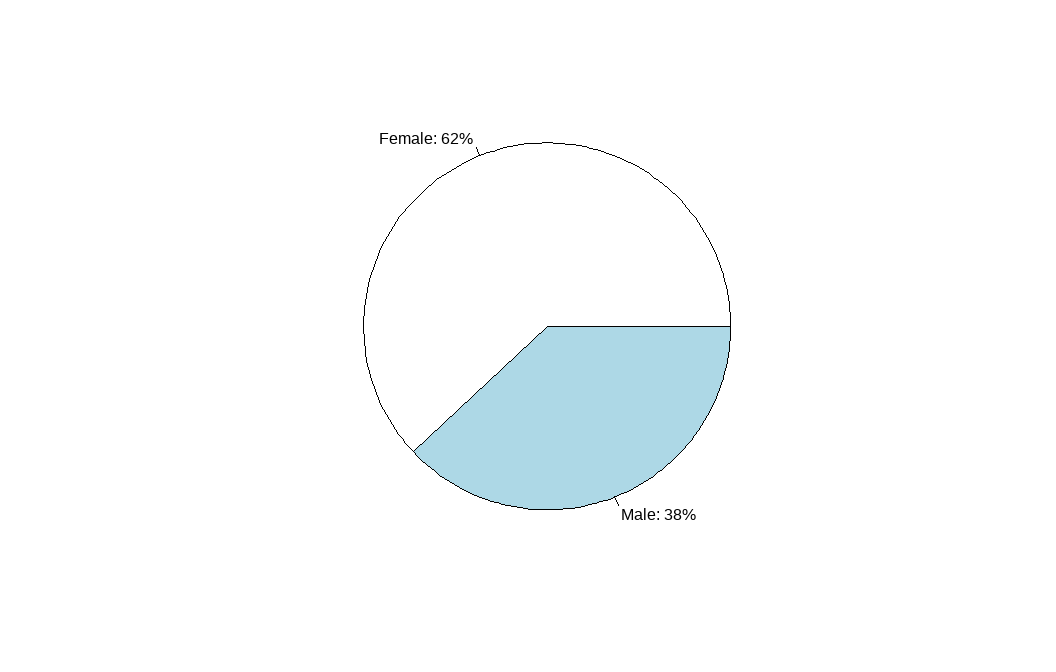
Most of the respondents, 92 (54%) frequenting Umoja refugee CBO belonged to the 18 to 31 years old age group. The second category was the 32 to 38 age group represented by 44 (26%) respondents. The next in line were the group of 39- to 45-year-olds with 25 (15%) while those above 45 years old were the minority with 9 (5.3%) of all respondents. These results indicate that most refugees frequenting this CBO are young people between the ages of 18 and 30 years. This informs that people who flee from most countries seeking opportunities or asylum are largely young people, followed by middle aged refugees while only a small proportion of elderly people leave their countries due to conflict or search for better lives and opportunities. This could also mean that some flee as children but over time they attain the age of maturity still in asylum countries as proven by this study that majority of respondents have stayed in Kenya for more than 10 years which could mean that some of the young respondents could have been born in Kenya. The age group of the majority of refugees frequenting Umoja Refugee CBO informs that youths and middle-aged people are more energetic and actively looking for livelihood and socioeconomic opportunities.



*Figure 4.1: Age groups the Respondents*

### Gender of the Respondents

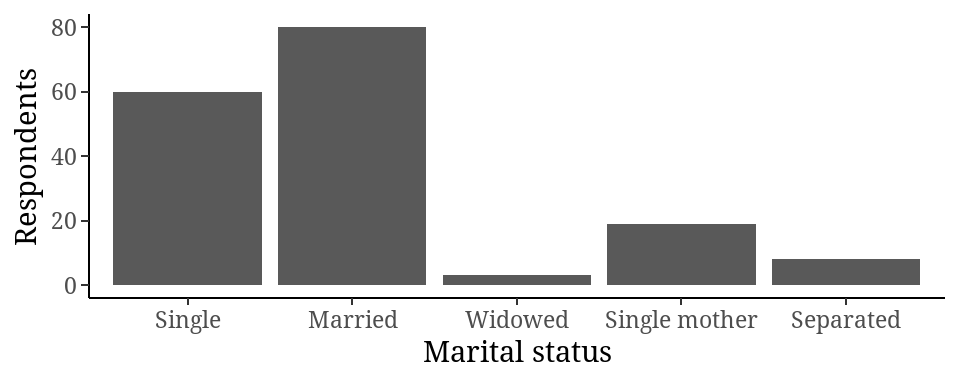
Most of the refugee respondents frequenting the Umoja Refugee CBO were women or female with 105 (62%) of respondents compared to men who were 65(38%). The first people to leave any locations of crises are women and children while men are left behind fighting in the wars, managing the conflicts or resolving the conflicts. Therefore, most men are left behind and only a few men accompany the women and children in seeking asylum or refugee status in foreign countries. The results are therefore in agreement with the general pattern of movement in times of crises.



*Figure 4.2: Gender of Respondents*

### Marital Status of the Respondents

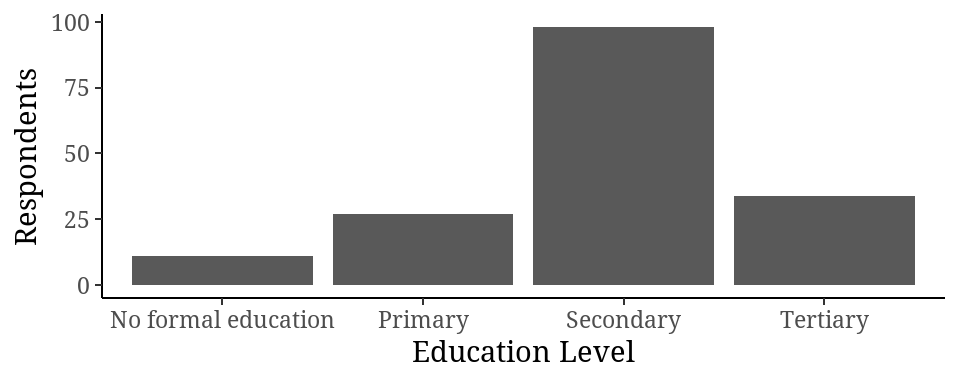
The married respondents were more than other groups of people since they were represented by 80 (47%) of all refugees frequenting the Umoja CBO followed by single or unmarried people at 60 (35%). The single mother’s group comprised 19 (11%) of all respondents while the separated were 8 (4.7%) and widowed 3 (1%). The age groups of the represented refugees controlled the marital status of the group; thus, explaining the low percentages for the separated and the widowed and single parents while the married and the single individuals making up the majority with 140 (82%) of the respondents. The category of single mothers was added to the marital status category after some respondents expressed a concern about a sense of belonging in terms of marital status where some of them got the children through rape and they did not feel either really single but also not married.



*Figure 4.3: Marital Status of Respondents*

## Level of Education of the Respondents

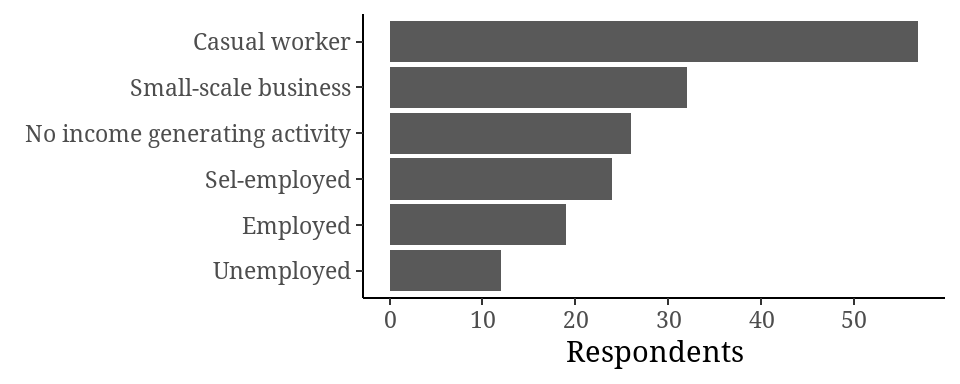
Most of the respondents 98 (58%) had achieved secondary education as their highest academic excellence followed by 34 (20%) of respondents with tertiary education level and 27 (16%) with primary education level. Only 11 (6.5%) of the respondents lacked any formal education or training.



*Figure 4.4: Education level of Respondents*

## Occupation of the Respondents

Casual workers comprised 57 (34%) of the respondents closely followed by self-employed and small business entrepreneurs comprising 56 (33%) respondents in total. The unemployed and those not engaging in any income generating activity comprised 38 (22%) of the respondents while only 19 (11%) were formally employed.



*Figure 4.5: The occupation of Respondents*

## Respondents’ Residence Period

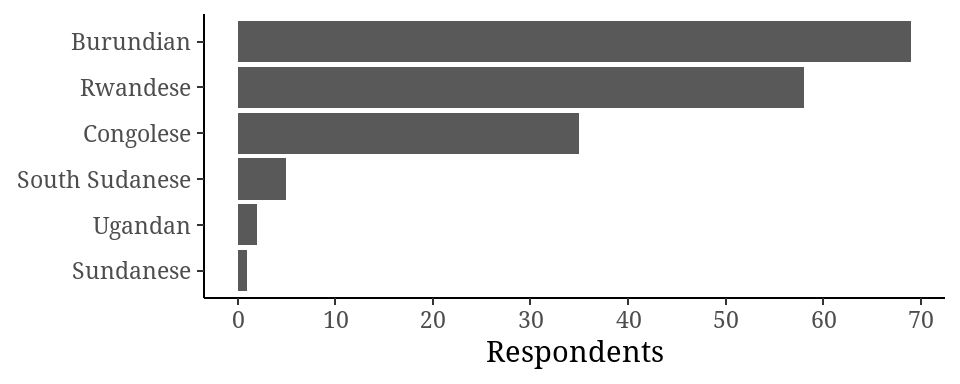
The residence time as illustrated showed that 71 (42%) of the respondents had been living in Kenya for over 10 years, 59 (35%) above 5 years but less than 10 years while 40 (24%) of the respondents had been living in Kenya for a period of less than five years. The age groups selected for this study were above 18 years old, bearing in mind that most people flee their countries as children, then the residence time must have been above 10 years. Most of the conflicts in the neighbouring countries happened over 10 years ago besides the ongoing conflicts in the region.



*Figure 4.6: Respondents’ Residence Period*

## Nationality of the respondents

The largest proportion of respondents frequenting Umoja refugee CBO were 69 (41%) from Burundi, followed by 58 (34%) respondents from Rwanda, then Congo 35 (21%). Smaller proportions came from South Sudan, Sudan, and Uganda at 2.9%, 0.6%, and 1.2%respectively.



*Figure.4.7: Nationalities of Respondents*

## Prevalence of GAD among Respondents

The first objective of this study sought to determine the prevalence of GAD among refugees. The prevalence of general anxiety disorder was as illustrated in the table below; the majority of the respondents reported mild anxiety 107 (63%) as 48 (28.2%) of the respondents reported moderate anxiety while only 3 individuals making up 1.7% of all respondents registered severe anxiety disorder, nevertheless, only 12 (7.1%) of the respondents were reported to be normal or to exhibit minimal anxiety. The illustration indicated the presence of anxiety among refugees which could have several precipitating factors. This informs that Community Based initiatives could contribute in one way or another to the reduction of the severity of anxiety disorders among refugees in urban setups.

*Table 4.3: Prevalence of GAD among respondents*

| GAD | Prevalence of GAD |
| --- | --- |
| Minimal Anxiety | 12 (7.1%) |
| Mild Anxiety | 107 (63%) |
| Moderate Anxiety | 48 (28.2%) |
| Severe Anxiety | 3 (1.7%) |

# Prevalence of GAD Across Social Demographic Factors

### GAD Scores Across Age Groups

Respondents between 32 and 45 years had the highest mean anxiety score [9.04 (3.59)], followed by respondents above 45 years old with 8.67 (3.94) mean anxiety score, which was followed by 25- to 31-year-olds with 8.27 (2.47) mean anxiety scores. Respondents between 18 and 24 years had the lowest mean anxiety score 7.34 (2.70), followed by 32- to 38-year-olds 7.84 (3.06). The results indicate that all age groups reported a mild level of anxiety. There was no statistical difference in anxiety scores across the age groups (p = 0.5, ns, anova).

*Table 4.4: GAD Scores Across Age Groups*

| Age group | 18 - 24 years | 25 - 31 years | 32-38 years | 39 - 45 years | Above 45 years | p-value |
| --- | --- | --- | --- | --- | --- | --- |
| GAD score | 7.34 (2.70) | 8.27 (2.47) | 7.84 (3.06) | 9.04 (3.59) | 8.67 (3.94) | 0.5 |

### GAD Scores across Gender

The results as illustrated below indicated that women had higher anxiety mean scores 8.33 (3.22) than men 7.77 (2.43) however, both were mild anxiety and thus not statistically significant (p = 0.2, ns, t-test).

*Table 4.5: GAD Scores Across Gender*

| Gender | Female, N = 105 | Male, N = 65 | p-value |
| --- | --- | --- | --- |
| GAD score | 8.33 (3.22) | 7.77 (2.43) | 0.2 |

### GAD Scores across Marital status

Respondents from all marital statuses reported mild anxiety with the separated, single mothers and the married registering higher mean scores than the single and the widowed. The anxiety mean scores across marital status were not statistically significant (p=0.085, ns, anova).

*Table 4.6: GAD Scores Across Marital Status*

| Marital status | Single, N = 60 | Married, N = 80 | Widowed, N = 3 | Single mother, N = 19 | Separated, N = 8 | p-value |
| --- | --- | --- | --- | --- | --- | --- |
| GAD Score | 7.33 (2.34) | 8.29 (3.08) | 7.67 (0.58) | 9.47 (3.88) | 9.25 (2.38) | 0.085 |

### GAD Scores across Education Level

Respondents with tertiary education reported the lowest anxiety mean score 7.09 (3.65) while primary educated and respondents without formal education had the highest mean anxiety scores 9.07 (3.44), the anxiety scores were not statistically significant across the education level (p = 0.2, ns, anova).

*Table 4.7: GAD Scores Across Education Level*

| Education level | No formal education, N = 11 | Primary, N = 27 | Secondary, N = 98 | Tertiary, N = 34 | p-value |
| --- | --- | --- | --- | --- | --- |
| GAD Scores | 9.00 (1.90) | 9.07 (3.44) | 8.11 (2.52) | 7.09 (3.65) | 0.2 |

### GAD Scores Across Occupations

Individuals without any income generating activity had the highest anxiety scores 9.23 (2.35) followed by casual workers and small business owners, 8.25 (2.20), while the employed had the lowest anxiety mean scores 6.84 (3.66). The mean scores were statistically insignificant across occupations (p=0.089, ns, anova).

*Table 4.8: GAD Scores Across Occupations*

| Occupation | Casual worker, N = 57 | Employed, N = 19 | No income generating activity, N = 26 | Self-employed, N = 24 | Small-scale business, N = 32 | Unemployed, N = 12 | p-value |
| --- | --- | --- | --- | --- | --- | --- | --- |
| GAD Score | 8.42 (2.67) | 6.84 (3.66) | 9.23 (2.35) | 7.33 (3.29) | 8.25 (2.20) | 7.50 (4.27) | 0.089 |

### GAD Scores across Residence Period

The statistical tests indicated that no matter the time an individual had been in Kenya as a refugee, the level of anxiety was the same statistically (p = 0.7, ns, anova). However, individuals who had stayed longer in Kenya reported higher anxiety scores. This indicates that protracted displacement has an influence on the level of anxiety among forcibly displaced populations.

*Table 4.9: GAD Scores Across Residence Period*

| Residence time | 2 - 5 years, N = 40 | 6 - 9 years, N = 59 | Over 10 years, N = 71 | p-value |
| --- | --- | --- | --- | --- |
| GAD scores | 7.98 (2.65) | 8.19 (2.15) | 8.14 (3.63) | 0.7 |

### GAD Scores across Nationalities

Respondents from Burundi, Congo and Rwanda exhibited higher levels of general anxiety compared to other nationalities represented.

*Table 4.10: GAD Scores Across Nationalities*

| Nationality | Burundian, N = 69 | Congolese, N = 35 | Rwandese, N = 58 | South Sudanese, N = 5 | Sundanese, N = 1 | Ugandan, N = 2 | p-value |
| --- | --- | --- | --- | --- | --- | --- | --- |
| GAD score | 8.19 (2.94) | 8.31 (2.26) | 7.91 (3.46) | 7.40 (1.52) | 9.00 (NA) | 9.50 (2.12) | 0.7 |

# Precipitating Factors of GAD

The second objective of the study sought to investigate the precipitating factors of GAD among refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya. The lack of refugee status and solutions, lack of income and income generating activities, lack of places to reside, issues regarding immigration, lack of basic needs which relate to the lack of income, and improper documentation due to lack of refugee solutions were the greatest precipitating factors of GAD where more than 90% of the refugees frequenting the Umoja refugee CBO faced. The language barrier caused anxiety to 130 (76%) while insecurity was a concern to 119 (70%) of the respondents and risks to relationships only caused anxiety to 66% of the refugees frequenting Umoja refugee camp. Discrimination was not a concern to the majority of the respondents (69%) as it was a concern to only 31% of the respondents.

*Table 4.11: Precipitating Factors of GAD*

| Anxiety Precipitating Factors | Causing Anxiety | Not Causing Anxiety |
| --- | --- | --- |
| Lack refugee solutions | 168 (99%) | 2 (1.2%) |
| No income | 167 (98%) | 3 (1.8%) |
| Lack of residence | 165 (97%) | 5 (2.9%) |
| Lacking basic needs | 165 (97%) | 5 (2.9%) |
| Uncertainty | 163 (96%) | 7 (4.1%) |
| Immigration issues | 164 (96%) | 6 (3.5%) |
| Homesickness | 156 (92%) | 14 (8.2%) |
| Improper documentation | 153 (91%) | 16 (9.5%) |
| Language barrier | 130 (76%) | 40 (24%) |
| Insecurity | 119 (70%) | 51 (30%) |
| Relationships lack | 112 (66%) | 58 (34%) |
| Discrimination | 53 (31%) | 117 (69%) |

# Community Based Interventions

The last objective of this study sought to establish the level of satisfaction with community-based interventions offered by Umoja Refugee CBO, to refugees in the urban setup, Nairobi, Kenya. The study found out that there are several community-based interventions that are exercised within the Umoja Refugee CBO. The effectiveness of the interventions was determined by use of the weighted mean against the means of the interventions, when the means of the statements were greater than the weighted mean it was taken to mean the strategy or intervention was effective and the vice versa. The most effective interventions at the refugee CBO included provision of food and basic needs 144 (85%), social support from visitors 134 (79%), individual counselling 108 (64%), and psychological training. The interventions that were effective at medium proportions included guidance from leadership 73 (43%), handicraft tailoring training at 77 (45%), development of skills and talents and provision of job opportunities at 66 (39%) and 56 (33%) of the respondents respectively. The interventions not employed and ineffective include provision of school fees and uniforms 22 (13%) and group counselling 23 (14%).

*Table 4.12: Level of satisfaction with Community-Based Interventions*

| Community-Based Interventions | Satisfied | Not Satisfied |
| --- | --- | --- |
| Food basic needs | 144 (85%) | 26 (15%) |
| Visitor’s Social support | 134 (79%) | 36 (21%) |
| Individual counselling | 108 (64%) | 62 (36%) |
| Psychological trainings | 90 (53%) | 80 (47%) |
| Handicraft tailoring training | 77 (45%) | 93 (55%) |
| Leader’s guidance | 73 (43%) | 97 (57%) |
| Skills talent development | 66 (39%) | 104 (61%) |
| Job opportunities | 56 (33%) | 114 (67%) |
| Group counselling | 23 (14%) | 147 (86%) |
| Fees and uniforms | 22 (13%) | 148 (87%) |

Summary of key Findings

The following were the study’s key findings:

1. This study illustrated that there were more women 105 (62%) than men 65 (38%) in the Umoja refugee CBO, more young people between 18 and 40 years 92 (54%) than older people above 40 years old 69 (46%), most of them 71 (42%) having resided in the country for more than ten years, the majority 98 (58%) with secondary education, and just a few 34 (20%) with tertiary education training.

2. Most of the respondents were casual workers at 57 (34 %), a few in employment 19 (11%) while quite a chunk 38 (22%) had no income-generating activity.

3. A third of the respondents reported or exhibited GAD, which was more pronounced among women 105 (62%) than men 65 (38%), among younger people 92 (54) than older people 69 (46%) and higher among those without income generating activities compared to those with incomes.

4. The precipitating factors of anxiety as perceived by above 90% of the respondents included lack of refugee solutions, lack of income to meet daily requirements, lack of immigration solutions, lack of basic needs, uncertainties due to lack of necessities of life, and improper documentation.

5. The community-based interventions that were perceived by respondents to reduce anxiety and improve refugee situation included provision of food and basic necessities of life 144 (85%), visitations 134 (79%), provisions of income generating activities, handicraft training 77 (45%) and psychological training 90 (53%). Group counselling was not found to be effective or not available to 23 (14%) as well as the provision of school fees and school uniforms at 23 (14%).

Chapter Summary

This chapter covered data presentation, analysis, and presentation of results. The process was conducted in respect to the study objectives. The descriptive analysis involved frequencies, and percentages. Chapter five discusses study findings, conclusions, and recommendations.

# CHAPTER FIVE

# DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

## Introduction

This chapter covers the discussion of key findings, and suggestions that resulted from the research guided by the study objectives and Recommendations will equally be drawn, and at the end of it all suggestions for further research will also be highlighted. The objectives of this study were to determine the prevalence of GAD among Refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya; to investigate the precipitating factors of GAD among refugees in protracted displacement at Umoja Refugee CBO, Nairobi, Kenya; to establish the level of satisfaction with community-based interventions offered by Umoja Refugee CBO, to refugees in the urban setup, Nairobi, Kenya.

## Discussion of key findings

### Prevalence of GAD among refugees

This study reported that 29.2% of all respondents had moderate to severe anxiety, the prevalence therefore of anxiety could be said to be 29.9%. The reported prevalence is higher compared with a systematic review of anxiety disorders which reported a global anxiety prevalence between 10.6% and 16.6% (Somers et al., 2016). The prevalence of anxiety was lower because the study did not consider specific circumstances such as refugees and conflicts or regional prevalence. Haller et al., (2014) conducted an in-depth review of general anxiety prevalence among world populations and reported a prevalence between 4.1% and 13.7%, a prevalence lower than the prevalence reported in this study. That study had a similar weakness in that it did not consider individuals in special circumstances such as wars and conflicts.

Several other studies done without special circumstances of wars and conflicts reported very low prevalence of general anxiety disorder (Ahmad et al., 2018; Haller et al., 2014; Martín-Merino et al., 2009; Ruscio et al., 2017; Spitzer et al., 2020.). A study done by Georgiadou et al., (2018) on mental distress among Syrian refugees in Germany, reported that 13.5% of all respondents had moderate to severe GAD. The said study reported a lower prevalence than the present study and the differences can be explained by amenities and support mechanisms provided to foreigners and refugees in the two different countries. Secondly, Kenya is a developing country while Germany is a first world country with capabilities of supporting asylum seekers and refugees. Another study by Kirmayer et al., (2011) indicated that immigrants to Canada usually have lower mental health disorders including general anxieties mainly due to screening done to foreigners before being admitted into the country.

Another study conducted by Schlechter et al., (2021) indicated elevated anxiety compared to the general public among refugees and foreigners. A study on elucidation of mental health disorders among Rohingya refugees in Malaysia by Kaur et al., (2020) reported that 41% of all 200 participants had developed general anxiety disorder. This study had a higher prevalence than this study because the participants were almost similar to those studied in Kenya. A review and meta-analysis conducted on refugees in high income countries Henkelmann et al., (2020) reported a 30% prevalence of general anxiety which is consistent with this study. Another study on mental health of immigrants due to armed conflict reported a 32% prevalence of general anxiety disorder (Mesa-Vieira et al., 2022), findings consistent with this study.

This study illustrated that the prevalence of anxiety was higher in women (32.9%) than men (23%) which is consistent with Shide (2020) and numerous other studies indicating higher mental health needs and disorders among women than men (Kaur et al., 2020; Pumariega et al., 2015). Kirmayer et al. (2021) reported that general anxiety disorders are higher among younger people than older people, the study is somewhat consistent with this study since the very young had the lowest anxiety (3.06) while the middle-aged had the highest anxiety (8.07) scores and the eldest had the lowest (3.07) anxiety scores. Highly educated and skillful individuals have lower anxiety compared to individuals with only basic education and without any skills (Salami et al., 2019), a study consistent with the findings of this study. A school of studies as illustrated above thus indicated a high prevalence of anxiety disorders among persons exposed to armed conflict or civil conflicts that lead to displacements of populations. The results of this study are consistent with most findings whenever a conflict is associated.

## Precipitating factors of GAD

The causes of anxiety are generally a plethora of factors as illustrated in this study and they included lack of refugee status and solutions, lack of income and income generating activities, lack of places to reside, issues regarding immigration, lack of basic needs which relate to the lack of income, and improper documentation due to lack of refugee solutions. Among the precipitating factors of general anxiety are uncertainties, lack of income or income-generating activities, homesickness, lack of refugee solutions, improper documentation, immigration issues and language barriers (Pumariega et al., 2015). The findings of this study on the precipitating factors of anxiety are consistent with a study done in Canada and Germany which reported that lack of support systems to foreigners and refugees significantly results in elevated levels of anxiety (Georgiadou et al., 2018; Kirmayer et al., 2011). Discrimination was not a concern among foreigners in this study but in the developing world, racial and ethnic discrimination were pronounced and significantly increased anxiety levels from mild to moderate and severe (Georgiadou et al., 2018).

## Community-Based Interventions

Provision of food and basic needs, social support from visitors, individual counselling, and psychological training, guidance from leadership, handicraft tailoring training, development of skills and talents and provision of job opportunities were among community-based interventions reported in this study. such interventions are meant to deal with general anxiety disorders among other mental health disorders and needs that include use of medicines, counselling, and community-based interventions (Salami et al., 2019). This study utilized community-based interventions as a means of combating the mental health needs of refugees. The provision of social support and basic human needs such as food and shelter were the most effective community-based interventions according to refugees frequenting Umoja refugee CBO. The findings of this study are consistent with (Georgiadou et al., 2018), who reported that social and economic support systems in Germany greatly reduced the suffering of foreigners after exposure to armed conflict. Rousseau and Frounfelker (2019) reported on mental health needs and services for migrants among primary caregivers and illustrated that language barriers and cultural differences greatly affected the delivery of care among refugees. The study thus recommended group counselling on acculturation which was conspicuously ineffective in this study and social support through visitations as practiced among refugees at Umoja refugee CBO.

## Conclusion

The findings of this study were compared with studies involving similar circumstances and themes and were found to be consistent with most literature. This chapter illustrated this in-depth by using varied literature from diverse regions of the world. The study compared anxiety disorder for literature not concerned with conflict whether armed, civil, or economic as well as literature concerning itself with anxiety disorder among immigrants due to exposure to armed conflict. The study found that studies with a theme of armed conflict were consistent with the findings of this study while general studies on anxiety disorders were distant from the findings of this study. Uncertainties in new countries and regions of the world exacerbated anxiety coupled with a lack of basic needs due to a lack of income generating activities. Most of the community-based interventions did not seem satisfactory to the respondents except for a few.

## Recommendations

The study generally demonstrated that community-Based interventions are vital in alleviating anxiety concerns among refugees in protracted displacement; however, the magnitude of support provided to refugees by the CBOs needs further support for more effectiveness. The following bullet points are initiatives that this study found imperative in dealing with general anxiety disorders among protracted refugees and asylum seekers in Africa.

1. More support in terms of funds and capacity building needs to be channeled to the Community Based initiatives in terms of funds and capacity building to improve the effectiveness of services offered at the community level. This recommendation is deemed important since most refugees were reported to perceive provision of basic necessities and job opportunities as ways of dealing with generalized anxiety disorders.
2. Government support and greater integration in terms of access to socioeconomic opportunities would be also vital in reducing anxiety among refugees in Kenya.
3. The government and other organizations involved in providing refugees need also to improve on their processes and procedures to ensure refugees have access to the required documentation and in a timely manner to allow them to fully engage in socioeconomic activities aimed at improving their livelihoods and the economy of the host country as the study proved that meaningfully engaged refugees had lower levels of anxiety.
4. The government through the Department of Refugee services in consultations with refugees and other relevant actors in the legal and social sector should endeavor to find durable solutions for refugees in protracted displacement. This recommendation is as a result of the study findings that lack of proper immigration documentation services caused generalized anxiety, if such systemic issues are dealt with, most of the uncertainties would be eliminated. This finding is also attested by a finding in Germany that dealt with refugees who had been granted permission to enter Germany after the Syrian crisis. Although the Germans only allowed trained and highly educated individuals to immigrate into Germany, thus the availability of a government support system, their levels of anxiety were lower compared to those reported by this study.
5. More awareness on mental health is also needed to ensure refugees are aware of mental health concerns and how to seek support in a timely manner which will eventually improve the mental health outcome among refugees in urban setups in Nairobi, Kenya.

Recommendations for further studies

Finally, further studies on a similar topic are highly recommended and if possible, they should utilize a qualitative approach as the present study established during data collection data refugees in protracted displacement want to discuss issues causing them distress as well have a voice in designing durable solutions tailored to address their specific needs.

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# APPENDICES

## Appendix I: Study Questionnaire

Introduction

Dear respondent, my name is Manishimwe Anne-Marie, a student at Daystar University pursuing master’s in clinical psychology. I am carrying out research on *GAD among refugees in protracted displacement and community-based interventions in urban set-ups with a case study of the Umoja Refugee Community-Based organization in Nairobi Kenya.* You have been selected to participate in this study. Please answer the questions in this document as honestly and truthfully as possible. This survey is anonymous, and you have the liberty to opt out at any time or at any point should you feel uncomfortable with the questions asked with no consequence whatsoever. The study is being carried for academic purposes only and the results will be used for the same purposes. The information you provide here is for academic purposes and not for any other purpose. Please be assured that the information will be protected from any unauthorized access. Your participation is voluntary; however, your full participation would be appreciated. If possible, respond to all the questions. It should take you about 20-25 minutes at most to complete the questionnaire**.** In case you have any questions, you can call the researcher on 0700507358 for further information.

Do you agree to participate in this study? 1 (Yes), 2 (No)

If (Yes), please sign here:  Date: 

Section A: Demographic Information

1. What is your age in years?

Below 18 years ( )

18-24 years ( )

25-31 years ( )

32-38 years ( )

39-45 years ( )

Above 45 years ( )

1. Gender:

Male ( )

Female ( )

Other ( )

1. Marital status

Single ( )

Married ( )

Divorced ( )

Widowed ( )

Separated ( )

Single mother ( )

Single father ( )

1. Level of education:

No formal education ( )

Primary ( )

Secondary ( )

Tertiary ( )

1. Occupation:

Employed ( )

Self-employed ( )

Not employed ( )

Small scale business ( )

Casual worker ( )

No income generating activity ( )

Other ( )

1. Number of years in Kenya

Below 1 year ( )

2 – 5 years ( )

6 – 9 years ( )

Over 10 years ( )

1. Nationality:

Congolese ( )

Rwandan ( )

Burundian ( )

Ugandan ( )

South Sudanese ( )

Ethiopian ( )

Other ( ) Specify

Section B: Levels of anxiety (GAD-7 Questionnaire)

In this section, please indicate the level the given factors have made you feel generally anxious over the last 2 weeks, where 0= Not at all, 1=Several days, 2= More than half the days; 3= Nearly every day

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | 0 | 1 | 2 | 3 |
| 1.Feeling nervous, anxious or on edge |  |  |  |  |
| 2.Not being able to stop or control worrying |  |  |  |  |
| 3.Worrying too much about different things |  |  |  |  |
| 4.Trouble relaxing |  |  |  |  |
| 5.Being so restless that it is hard to sit still |  |  |  |  |
| 6.Becoming easily annoyed or irritable |  |  |  |  |
| 7.Feeling afraid as if something awful might happen |  |  |  |  |

Section C: Precipitating Factors of GAD among refugees

In this section, please indicate the extent to which the given factors have made you feel generally anxious where (1= to no extent, 2= to some extent, 3= to a great extent, 4 = to the greatest extent)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | 1 | 2 | 3 | 4 |
| 1. Feeling unsure of what next |  |  |  |  |
| 1. Missing my home country |  |  |  |  |
| 1. Lack of basic needs |  |  |  |  |
| 1. Inability to form strong personal relationships |  |  |  |  |
| 1. Stalled immigration procedures |  |  |  |  |
| 6. Lack of proper refugee documentation |  |  |  |  |
| 7. Fearing something bad may happen/insecurity |  |  |  |  |
| 8. Lack of a place to settle permanently |  |  |  |  |
| 9. Discrimination by local population in the host country |  |  |  |  |
| 10. Having to learn a new language/ inability to communicate effectively |  |  |  |  |
| 11. No access to any of the refugee durable solutions |  |  |  |  |
| 12. Inability to secure a sustainable source of income |  |  |  |  |

Section D: Community Based Organization Interventions

In the following services offered to you, please indicate the extent to which you have been satisfied by each of them where (0= service not received, 1= to no extent, 2= to some extent, 3= to a great extent, 4 = to the greatest extent)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intervention | 0 | 1 | 2 | 3 | 4 |
| 1. Individual counselling |  |  |  |  |  |
| 1. Group counselling |  |  |  |  |  |
| 1. Psychological trainings |  |  |  |  |  |
| 1. Guidance from the leaders |  |  |  |  |  |
| 1. Handicraft and tailoring training |  |  |  |  |  |
| 1. Skills and talent development (filming, photography, media stories, computer literacy, acting, etc.). |  |  |  |  |  |
| 1. Food and other basic needs |  |  |  |  |  |
| 1. Support with fees and uniforms |  |  |  |  |  |
| 1. Social support from others who also visit the centre |  |  |  |  |  |
| 1. Creation of job opportunities |  |  |  |  |  |

Thank you for your time and participation!

## Appendix II: GAD-7 item standard Questionnaire

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Over the last two weeks, how often have you been bothered by the following problems? | Not at all | Several days | More than half the days | Nearly every day |
| 1. Feeling nervous, anxious, or on edge | 0 | 1 | 2 | 3 |
| 2. Not being able to stop or control worrying | 0 | 1 | 2 | 3 |
| 3. Worrying too much about different things | 0 | 1 | 2 | 3 |
| 4. Trouble relaxing | 0 | 1 | 2 | 3 |
| 5. Being so restless that it is hard to sit still | 0 | 1 | 2 | 3 |
| 6. Becoming easily annoyed or irritable | 0 | 1 | 2 | 3 |
| 7. Feeling afraid, as if something awful might happen | 0 | 1 | 2 | 3 |

Column totals + + + =

*Total score*

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all

□

Somewhat difficult

□

Very difficult

□

Extremely difficult

□

Source: Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD-PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W.

Williams, Kurt Kroenke, and colleagues. For research information, contact Dr. Spitzer at [ris8@columbia.edu.](mailto:ris8@columbia.edu) PRIME-MD® is a trademark of Pfizer Inc. Copyright© 1999 Pfizer Inc. All rights reserved.

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# Scoring GAD-7 Anxiety Severity

This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of “not at all,” “several days,” “more than half the days,” and “nearly every day.”

GAD-7 total score for the seven items ranges from 0 to 21.

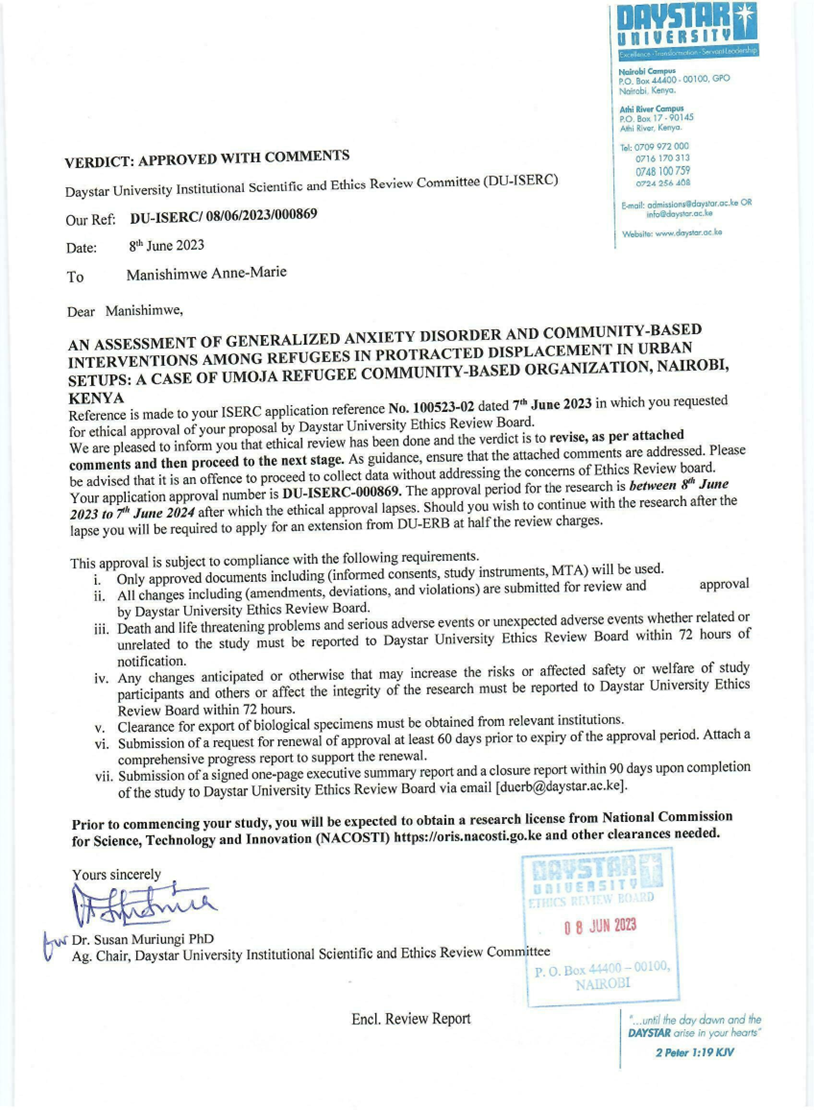
0–4: minimal anxiety

5–9: mild anxiety

10–14: moderate anxiety

15–21: severe anxiety

## Appendix III: Ethical clearance



## Appendix IV: Research Permit

