PSYCHOSOCIAL FACTORS INFLUENCING MENTAL HEALTH OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP, KENYA

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A Thesis Submitted in Partial Fulfillment for the Requirements of the Award of Master of Science in Disaster Management and Humanitarian Assistance of Masinde Muliro University of Science and Technology.

November, 2023

DECLARATION

This thesis is my original work prepared by no other than the indicated source and support and has not been presented elsewhere for a degree or any other award.

Signature …… Date …….

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CDM/G/01-56652/2017

CERTIFICATION

The undersigned certifies that I have read and hereby recommend for acceptance by Masinde Muliro University of Science and Technology a research proposal entitled **Psychosocial Factors influencing the Mental Health of Vulnerable Populations at risk in Kakuma Refugee Camp, Turkana County, Kenya.**

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DEDICATION

This thesis is dedicated to forcibly displaced populations and everyone who has struggled to find a home in this world. Special gratitude to my foster father, Mr. Patrick Nderitu (the late) for his words of encouragement and love. May Allah forgive his trespasses and remember his good deeds In Shaa Allah. My family and guardians for their continued support. You have been my anchor of motivation throughout this process.

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ABSTRACT

The refugee experience is characterized by exposure in one's country of origin to numerous traumatic incidents during migration and daily stressors after settlement in the camps because of natural disasters, wars and persecution based on their race, religion, political beliefs and social identity, who cannot rely on their country of origin to protect them. Although numerous studies on deaths, illnesses and physical traumas resulting from wars and disasters have been conducted, there are scanty longitudinal studies on how psychosocial issues influence refugees' mental health and the problem-specific interventions used to address mental ill health. The prevalence of mental ill health among refugees keeps increasing in spite existing psychiatric treatment options. The overarching objective of the study was to investigate the influence of psychosocial factors on the mental health of vulnerable populations at risk in Kakuma refugee camp, Turkana County, Kenya. The specific objectives were to determine the influence of socio-economic factors on the mental health of vulnerable populations at risk in Kakuma refugee camp; to explore the psychosocial wellbeing of vulnerable populations at risk in Kakuma refugee camp and to evaluate the psychosocial support interventions used to address mental health problems among populations at risk in Kakuma refugee camp. The study was guided by trauma and social causation theories. The study was underpinned by descriptive and evaluative research designs. Out of a sample frame of 38,530 and study population of 158,365, a sample size of 394 households was derived through stratified sampling (appendix VII), twelve key informants were selected through purposive sampling method and four FGDs were conducted. Structured questionnaires, interview guides, observation checklists and FGDs were used to collect primary data. Secondary data was sought from official reports, journals, and books. The data was analyzed using SPSS version 25.0. The analyzed data was presented using tables, charts, and bar graphs. Study findings indicated that the refugees are socio-economically disadvantaged as indicated by high dependency levels on humanitarian aid (60%), low income levels(60% with no income), inadequate shelter (47%) and food supply (47.4%), poor infrastructure (48%), poor social support systems as evidenced by resettlement and acculturation challenges (62.2%), disruption of family and community systems (58.1%), restrictions on capacity to work (63.7%).On psychosocial well-being of the refugees, the study established that the refugees exhibited evidence of trauma(extreme sadness 43%), anxiety (44.5%) and depression(55%). For psychosocial support interventions applied in addressing mental health problems, the study findings indicate that identification of safe spaces was the least effective intervention (61%) while rehabilitation programs was ranked the most effective (31.1%). Overall conclusion of the study was that the mental health of vulnerable populations at risk is influenced by psychosocial factors as indicated by statistical significance of P=0.000 at 99% confidence interval. The study findings offer psychosocial interventions based on an interdisciplinary approach for sustainable solutions towards addressing the mental health of vulnerable populations at risk among refugees in Kakuma camp. This study recommends prioritized socio-economic empowerment of the refugees, timely addressing of their psychosocial wellbeing, specialized psychosocial support interventions and a holistic approach in formulation of policies and procedures to safeguard the mental health of vulnerable populations at risk in Kakuma refugee camp.

TABLE OF CONTENTS

TITLE PAGE……..……...i

DECLARATION..... ii

COPYRIGHT..... iii

DEDICATION iv

ACKNOWLEDGEMENTS v

ABSTRACT.....vi

TABLE OF CONTENTS..... vii

LIST OF APPENDICES xiii

LIST OF TABLES xiv

LIST OF FIGURES.....xvi

OPERATIONALIZATION OF TERMS..... xviii

CHAPTER ONE: INTRODUCTION.....1

1.1. Background to the Study.....1

1.2. Statement of the Problem.....5

1.3. Objectives of the Study.....7

1.3.1. Overall Objective.....7

1.3.2. Specific Objectives 8

1.4. Research Questions 8

1.5. Justification of the Study 8

1.5.1 Academic Justification.....8

1.5.2 Policy Justification 9

1.6. The Scope of Study.....10

CHAPTER TWO: INTRODUCTION 11

2.0. Chapter Overview 11

2.1 The Concept of Mental Health among Refugees 11

2.1.1. Socio-economic, Demographic Factors and Mental Health of Refugees 11

2.1.2. Socio-economic Factors as part of Psychosocial Influence on Mental Health of Refugees.....15

2.1.3. Social Support, Influence, Connections, and Integration among Refugees.....17

2.1.4. Events of Social Disparity among Refugees.....19

2.1.5. Economic Hardship among Refugees 19

2.1.6. Implication of Social Disparities and Economic Hardship of the vulnerable Populations at Risk of Mental Health in Kakuma Refugee Camp.....20

2.1.7. Mental Health Impacts ranging from pre- to post Migration Experiences of Refugees in Kakuma Camp 23

2.2. Knowledge and Attitudes about Psychosocial Wellbeing and Mental Health among Refugees in Kakuma Refugee Camp 26

2.2.1. Psychosocial Wellbeing of Refugees.....27

2.2.2. Physical and Social Indicators of Psychosocial Trauma among Refugees.....28

2.2.3. Emotional and Psychological Indicators of Psychosocial Trauma among Refugees 28

2.2.4. Indicators of Anxiety Disorder among Refugees in Kakuma Refugee Camp ...29

2.2.5. Indicators of Depression among Refugees in Kakuma Refugee Camp 29

2.3. Pre-migration to Post-migration Experiences of Refugees.....30

2.4. Psychosocial Support Strategies Applied to Mitigate Mental Health Disorders among Female Refugees.....34

2.4.1. Psychosocial Strategies Applied to Mitigate Mental Health Disorders.....43

2.5. Traditional Approaches and Beliefs.....45

2.6. Conceptual Framework.....47

2.6.1. Trauma Theory.....48

2.6.2. Social Causation Theory 49

2.7. Conceptual Framework Model 52

CHAPTER THREE: RESEARCH METHODOLOGY 54

3.0. Introduction.....54

3.1. Research Design.....54

3.2. Study Area 57

3.2.1 Rationale for Choice of the Study Area.....58

3.3. Study Population.....59

3.4 Sample Size Determination and Sampling Procedure 59

3.5. Data Collection 61

3.5.1. Primary Data Collection 62

3.5.2. Secondary Data 67

3.6. Validity and Reliability of Research Instruments.....68

3.6.1. Piloting of Research Instruments.....68

3.6.2. Validity of Research Instruments.....68

3.6.3. Reliability of Research Instruments.....69

3.7. Data Analysis and Presentation 70

3.8. Limitations of the Study.....73

3.9. Ethical Considerations 74

3.10. Summary.....75

CHAPTER FOUR: INFLUENCE OF SOCIO-ECONOMIC FACTORS ON THE MENTAL HEALTH OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP.....76

4.1. Introduction.....76

4.1.1. Response Rate 76

4.1.2. Gender of the Respondents 77

4.1.3. Age of Respondents 78

4.1.4. Highest Level of Education Attained 78

4.1.5. Duration of Residence in the Camp in years 80

4.1.6. Camp of Residence of Respondent 80

4.1.7. Country of Origin of Respondents 81

4.1.8. Marital Status 82

4.1.9. Disability of Respondents 82

4.1.10. Size of Household and Household Heads 83

4.2. Socio-economic Characteristics 83

4.2.1. Source of Livelihood and Monthly Income 83

4.2.2. Monthly income of the respondents 84

4.3. Well-being Check of the Respondents 84

4. 4. Psychological wellbeing 85

4. 5. Social Wellbeing 87

4.6. Chronic illness 88

4.7. Social Support, Influence, Connections, and Integration 89

4.8. Events of Social Disparity 90

4.9. Economic Hardship 91

4.14 Implications of Socio-economic Disadvantage on Mental Health of Refugees ..93

CHAPTER FIVE: EXPLORATION OF THE PSYCHOSOCIAL WELLBEING ASPECT OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP 97

5.1. Knowledge and Attitudes about Mental Health 97

5.2. History of Torture as a Measure of Physical Wellbeing.....98

5.2.1. Sexual and Gender-based Violence 99

5.2.2. Serious Physical Injury from Combat Situation 100

5.2.3. Imprisonment.....100

5.2.4. Destruction of Personal Property.....101

5.2.5. Forced Evacuation under Dangerous Conditions 102

5.2.6. Witnessed Murder or Death.....102

5. 3. Emotional and Psychological Traumas.....104

5.4. Anxiety Symptoms.....106

5.5. Depression Symptoms 108

5.6. Relationship between Psychosocial Wellbeing and Mental Health.....109

CHAPTER SIX: EVALUATION OF THE PSYCHOSOCIAL SUPPORT INTERVENTIONS APPLIED IN ADDRESSING THE MENTAL HEALTH OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP…… 113

6.2.1. Rehabilitation Programs.....114

6.2.2. Psychotropic Medications.....115

6.2.3. Psychosocial Counselling and Occupational Therapy.....116

6.2.5. Case Management.....117

6.3. Relationship between Psychosocial Wellbeing and Mental Health.....119

CHAPTER SEVEN:SUMMARY, CONCLUSION AND RECOMMENDATIONS.....123

7.1. Summary of Findings.....123

7.2. Conclusions.....125

7.3. Recommendations.....127

7.4 Suggestions for Further Research 128

REFERENCES 130

APPENDICES.....156

LIST OF APPENDICES

Appendix I: Introduction Letter 156

Appendix II: Questionnaire for Household Heads.....157

APPENDIX III: Interview Guide for Humanitarian Officers (Kakuma) and Government Officers/County officers 166

Appendix IV: Interview guide for mental health practitioners, Aid workers and Care givers.....170

Appendix V: Focus Group Discussion Guide.....171

Appendix VI: Observation Checklist.....173

Appendix VII: MMUST Approval Letter.....174

Appendix VIII: NACOSTI permit 175

Appendix IX: SAMPLING TABLE for determining finite population.....177

LIST OF TABLES

Table 3. 1: Specific objectives and designs employed 56

Table 3. 2: Kakuma Population Statistics by Country of Original Sex and Age Group 59

Table 3. 3: Sampling Head of Households 60

Table 3. 4: Sampling of Key Informants 64

Table 3. 5: Focus Group Discussion 66

Table 3. 6: Summary of Study Sampling Strategy 67

Table 3. 7: Validity procedure of the study 69

Table 3. 8: Cronbach Alpha results 70

Table 3. 9: A Summary of Objectives, Indicators, Research Designs, Data Instruments and Data Analysis methods 72

Table 4. 1: Response rate 77

Table 4. 2: Gender of the Respondents 77

Table 4. 3: Age distribution of respondents 78

Table 4. 4: Level of education of respondent 78

Table 4. 5: Camp of residence of respondent 81

Table 4. 6: Refugee category based on country of origin 81

Table 4. 7: Marital status of respondent 82

Table 4. 8: Disability of Respondents 82

Table 4. 9: Respondent emotional wellbeing 85

Table 4. 10: psychological wellbeing of the respondents 86

Table 4. 11: Social Well-being 87

Table 4. 12: Social support and integration 89

Table 4. 13: Social disparity 90

Table 4. 14: Economic Hardship 91

Table 4. 15: Impacts of socio-economic strife on mental health of refugees 93

Table 4. 16: Model Summary for Socio economic factors and Mental health 94

Table 4. 17: ANOVA model for Socio economic factors and Mental health..... 95

Table 4. 18: Coefficients for Socio economic factors and Mental health..... 95

Table 5. 1: Knowledge and attitudes about mental health 97

Table 5. 2: History of Torture 98

Table 5. 3: Emotional and psychological traumas 104

Table 5. 4: Anxiety symptoms 106

Table 5. 5: How best do you describe your low moments? (Depression symptoms)108

Table 5. 6: Table 5.6: Model Summary for Psychosocial wellbeing and mental health 110

Table 5. 7:ANOVA for Psychosocial wellbeing and mental health 111

Table 5. 8: Model coefficients for Psychosocial wellbeing and mental health 111

Table 6. 1: Psychosocial support interventions applied in addressing mental health113

Table 6. 2: Coping strategies to enhance healing 118

Table 6. 3: Correlation analysis of Psychosocial wellbeing and mental health..... 119

Table 6. 4:Effect of psychosocial activities on mental health 120

LIST OF FIGURES

Figure 2. 1: Conceptual model (Source: Researcher 2021) 52

Figure 3. 1: Kakuma Refugee Sub-Camps (Source: Researcher (2021) 58

Figure 4. 1: Educational Level of Respondent..... 78

Figure 4. 2: Duration of residence in the camp..... 80

Figure 4. 3: Monthly income of the respondent..... 84

Figure 4. 5: Chronic Illness..... 88

LIST OF ABBREVIATIONS AND ACRONYMS

AIDSCAP AIDS Control and Prevention Program

CARE Cooperative for Assistance and Relief Everywhere

GBV Gender Based Violence

HTQ Harvard Trauma Questionnaire

IDPs Internally Displaced Persons

INGO International Non-Governmental Organization

LWF/WS Lutheran World Federation/ World Service

MHPSS Mental Health and Psychosocial Services

NGO Non-Governmental Organization

PMHSP Psychological Mental Health Support Program

PTSD Post Traumatic Stress Disorder

UNHCR United Nations High Commission for Refugees

WHO World Health Organization

KRC Kakuma Refugee Camp

PWD People with Disability

DCS Department of Children Services

OPERATIONALIZATION OF TERMS

Psychosocial factors these are social, environmental and economic factors that determine the quality of life that affect a person psychologically and emotionally.

Vulnerable populations at risk (VPR) refugees who are orphans, teenage mothers, people with disability (PWD) and/or with chronic illnesses and the elderly.

Refugee a person fleeing their country due to war, natural disasters or persecution.

Mental health this means the state of well-being in which an individual recognizes his/her own abilities, can cope with the normal stresses of life, productive and successful at work and able to positively contribute to the community affiliated to.

Mental disorder/illness a syndrome characterized by clinically significant disturbance in an individual's cognition, emotional regulation or behaviour that reflects a dysfunction in the biological, psychological or developmental processes underlying mental functioning.

Psychosocial wellbeing this involves cognitive, behavioural/emotional, social and physical/environmental aspects of an individual's well-being.

Post-traumatic stress Disorder (PTSD) a psychiatric disorder known to affect individuals who had traumatic experiences such as accidents, war, natural disaster or a violent assault.

Sexual violence an attempt to forcefully obtain a sexual act or any act associated with trafficking people directed against their sexuality.

CHAPTER ONE

INTRODUCTION

This chapter outlines the background of this study. Furthermore, it articulates the statement of the problem, research objectives and research questions which will guide the study. Lastly, this chapter introduces justification and scope of the study.

1.1. Background to the Study

As reported elsewhere, tribulations attributed to post-migration resulting from violence and subsequent fleeing altogether, affects the psychological well-being of the populations, which fall victims of displacement (Hirani *et al*., 2022; Rajbangshi *et al*., 2021). Consequently, Maloney *et al*., (2022) observed that war and displacement have impacted growth and development in children and adolescents and therefore, received a specific attention. Furthermore, while in their normality, many displaced children and adolescents have had their severe and lasting psychological effects extensively documented, despite these mental health difficulties they face (e.g., Alzaghoul *et al*., 2022).

The ongoing wars particularly in Asia, Africa, Latin America, and the Middle East have given rise to an ever-increasing exodus of refugee populations to developed countries for resettlement purposes. Some of the largest displacement crises include Syria, Afghanistan, South Sudan, Myanmar (Rohingya) and Somalia, which has also led to the population showing an exponential growth rate for the past 20 years, and currently at a record high in developing countries (UNHCR, 2019). According to UNHCR, Global Trends (2016), up-to 80% of refugees -most being children- end up spending the rest of their lives in low-income countries.

Five African countries alone have housed 4.1 million (65%) of the all refugees in the region, and about 20% of the world's refugee population. These refugees can be traced back to the Central African Republic (CAR), Somalia, South Sudan, and the Democratic Republic of the Congo (DRC) (UNHCR Global Report, 2018). In a study covering four distinct post-conflict settings of diverse histories, De Jong *et al*., 2001 cited 37.4 percent of PTSD prevalence in Algeria and 15.8 percent in Ethiopia.

Like other African hosting countries, Kenya struggles when it comes to hosting refugees as it already strives to suffice for infrastructural requirements of its own population, along coping with the added responsibility of accommodating more than half a million refugees. Furthermore, its geographic location renders security issues a concern, given its porous border with Somalia. Consequently, these series of events has caused much concern in the government, given an unprecedented smuggling of illegal firearms and cross-border movement of Somali-based militants (Lambo, 2012).

Located in Northwest Kenya, the famous Kakuma refugee camp hosts refugees from such countries as Burundi, Sudan, South Sudan, Rwanda, Democratic Republic of Congo, Somalia, and Ethiopia. In the camp, women may be subjected to rape and social exclusion, because of their increased vulnerability or their real or perceived political or ethnic affiliation. Rape and other types of sexual harassment, both in their form and in their motivation, are also gender specific.

Post-migration stressors have consistently been found to predict levels of distress as powerfully as prior war exposure (Miller & Rasmussen, 2016).

There is a high incidence of mental distress among Kakuma refugees, coupled with abundant risk factors context for developing mental health problems: loss of property,

people, and status; broken interpersonal relationships and social networks, serious and repeated traumatic experiences, relocation, vulnerability, potential instability, and misuse of drugs.

Farhat *et al*., (2018) report a high incidence of exposure to traumatic events among the forcibly displaced populations. Elsewhere, (Fegert *et al.*, 2018), such events as social violence, those resulting from wars and abuse within families, have been attributed to trauma among the refugees. To some extremes, many fall victims of life-threatening conditions such as crossing of the Mediterranean or perhaps the fist-hand experience on the countries they settle in. Though sometimes overlooked, torture, rape and armed conflict altogether form acts which affect these victims, far more than accidents and natural disasters do.

Upon their arrival in the host countries, the refugees are constantly faced with several stressors stemming from the countries displaced from. Some of these factors are discrimination, insecurity about their legal status as well as acclimatizing on the new environment (Schick *et al*., 2016). Elsewhere, the coordinator of public health and migration at the WHO Regional Office for Europe, Santino Severoni quipped that being a refugee is not a major criterion for potential risks of mental health but can result from other stressors (Hunter, 2016).

Although all refugees are vulnerable, the degree of vulnerability may vary based on certain risk factors such as age, gender, illnesses, disability and social status as (Mendola & Pera, 2022) ascertained. This then makes refugees particularly at risk for mental health problems.

It is quite a challenge in trying to estimate data for prevalence of mental health among asylum seekers as well as refugees. Nevertheless, data reports indicate a significantly high prevalence rates of mental disorders in such populations (Charlson *et al.,* 2019).

Quosh *et al.,* (2013) illustrate an increased level of psychological distress among the displaced persons, after a study on their mental health. Furthermore, while looking at the average of MHPSS for internally displaced people and refugees in difficult-to-access areas is minimal, recent study reveals a growing demand for culturally appropriate services (Abou-Saleh & Hughes, 2015).

Refugee characteristics such as sex were potentially investigated as moderators of the mental health of these refugees, and the scales seemed not in favor of the female refugees. In children and adolescents, however, there seem to be less effects of stresses of displacement, owing to their greater resilience as compared to adult refugees between ages 18 and 65 years (Porter & Haslam, 2005). Refugees experience multiple types of abuse which mainly is gender-based, but most of the literature focuses on such sexual violence, as rape and forced sex (Vu *et al.,* 2014). Consequently, rape has been implicated as a weapon of war in recent conflicts in such countries as Bosnia and Sierra Leone (Ten Bensel & Sample, 2017).

Typically, there is lack of safe shelter, clean water and security for women in refugee camps, making them much more prone to attacks. If they must travel long distances to look for water and firewood, women are predisposed to these attacks. In addition, in several communities, widows are stigmatized and discriminated against, so special and focused efforts will be needed to recognize and address their mental health and psychosocial support needs (Ahmed, 2022).

Women engaging in war are more likely than men to experience signs of mental distress. The added burden of harassment and sexual abuse which varies in intensity depending on the setting and community, is one reason for this difference (Engdahl *et al*., 2003). Researchers argue that gender-based focus group discussions can inform policy on recognizing gender-specific needs, particularly where women, in front of men hardly express opinions or needs, and where stigma and prejudice can result from admitting to mental or psychosocial stress. This research is important to the current analysis but does not directly concentrate on women in refugee camps.

UNHCR (2016) research shows that in capacity, limited research and inadequate collection of routine data in health centers leads inaccurate and shallow epidemiological data on mental health issues in Kakuma refugee camp. Clearly, there is a dearth of information on literature on this risk and therefore, this study sought to fill this gap.

1.2. Statement of the Problem

The World Health Organization (WHO, 2022) defines mental health as a state of well-being in which every individual realizes his or her own abilities, can deal with the typical stresses of life, can engage in meaningful work and contribute to society. Rather than viewing mental health as synonymous with mental diseases or illnesses, this definition emphasizes psychological and social functioning to be strong and places a premium on the success and happiness of the individual. Promotive intervention is as sensitive as it gets in this situation because it is especially important to boost self-esteem and hope (Tol *et al*., 2015).

The issue of mental health has continually been perceived from a psychopathological point of view hence the focus has been entirely on providing psychological

interventions while overlooking stressors that are related to the experience of displacement itself (Miller & Rasmussen, 2017). These stressors include pre-migration exposure to violence and destruction of war, peri-migratory stress factors during flight as well as post-migration factors (Fazel, 2018). These displacement–related stressors lead to psychosocial vulnerability which entails the cognitive, behavioral and emotional well-being that is continuously influenced by the social environment of an individual which is the gap that this thesis intends to fill. By focusing on underlying psychosocial issues influencing refugees' mental health, this study seeks to devise sustainable solutions from a holistic approach to address the issues of mental health among refugees which is fundamental in the development of effectively functioning communities. This therefore inclines the study towards a paradigm shift which is evidenced by the scope of my study objectives.

The influx of people migrating across the world has increased migration related psychopathology and thus need for proper mental health care. Poor mental health can be both a cause and a consequence for vulnerability. According to a study done by Bogic *et al*. (2012), on mental health disorders among people with refugee backgrounds in Europe indicated that 54.9% met criteria for at least one mental health disorder according to the DSM-5 (American Psychiatric Association, 2013).

There is need to adequately improve prevention steps of mental illnesses and consequently, the promotion of mental health by assessing and acting on the social determinants of health (WHO, 2014). A research in three separate countries (Germany, Italy and the United Kingdom) of long-term refugees from the former Yugoslavia found that these factors raised the risk of mental illness in refugees in all three countries (WHO, 2018).

A heterogeneous refugee population displaced by the effects of civil wars and natural hazards is hosted by the infamous Kakuma refugee camp in Kenya. Therefore, they show a wide range of pre-migration, migration, asylum, resettlement and repatriation periods which cumulatively impact their physical and mental health at varying levels. Over 100,000 refugees from South Sudan, Burundi, Ethiopia, the DRC and Somalia, live in the Kakuma refugee camp (UNHCR, 2016). There is growing concern, however, that female refugees continue to encounter dehumanizing conditions and other acts of abuse of human rights (Varalakshmi *et al*., 2016). The prevalence and social distribution of mental health issues in countries with high incomes has been well established. Although the issue is increasingly being recognized in low- and middle-income countries (LMICs), there is still a substantial gap in studies to quantify the problem, and in mental illness treatment measures, policies and services. Similarly, to resolve the particular gender dynamics associated with behavioral disorders, there is little or no focus on specialized psychiatric clinical intervention. It is based on the above argument that psychosocial factors influencing mental health of vulnerable populations at risk in the Kakuma refugee camp, Kenya will be investigated in the current report.

1.3. Objectives of the Study

1.3.1. Overall Objective

Overall objective of the study was to investigate the influence of psychosocial factors on the mental health of vulnerable populations in Kakuma refugee camp, Turkana County, Kenya.

1.3.2. Specific Objectives

The specific objectives of the study are:

i) To determine the influence of socio-economic factors on mental health of vulnerable populations at risk in Kakuma refugee camp.

ii) To explore the psychosocial wellbeing of vulnerable populations at risk in Kakuma refugee camp.

iii) To evaluate the psychosocial support interventions applied to address the mental health of vulnerable populations at risk in Kakuma refugee camp.

1.4. Research Questions

i) How does socio-economic factors influence mental health of vulnerable populations at risk in Kakuma refugee camp?

ii) How is the psychosocial well-being of vulnerable populations at risk in Kakuma refugee camp?

iii) What are the psychosocial approaches applied in addressing the mental health of vulnerable populations at risk in Kakuma refugee camp?

1.5. Justification of the Study

This study will be useful for both academic and policy formation.

1.5.1 Academic Justification

Credible relevant studies have been conducted by various researchers (Fisher *et al*., 2012, Kiering *et al*., 2011), on the perinatal mental health problems in low- and LMICs. Most of these studies narrowly focus on the general population and not as per the more vulnerable sub-populations among refugees as well as the immediate effects of conflict as opposed to both pre and post-migration factors that impact the refugees' mental

health in Kakuma Camp. Individual functioning issues and community structural problems were the main adversities among the urban Somali refugees. In Somali community, particularly, daily stressors were attributed to altered mental health and psychosocial outcomes, while unhelpful effects of war stretch through generations (Hyojin Im *et al.,* 2017). Moreover, there is little research on how certain preexisting social determinants and social issues arising from conflict and violence and natural disasters influence the mental health of refugees as well as mitigation strategies that cater for population-specific needs in Kakuma Camp. Therefore, this study is motivated by this knowledge gap, which it seeks to fill hence providing future researchers with useful knowledge.

1.5.2 Policy Justification

Host countries implement policies which are crucial to the mental health of refugees. There is an increased concern by the international humanitarian organizations working in Kakuma Refugee Camp of deteriorating mental health of the majority of the refugees (UNHCR, 2016). The living conditions, pre-migratory social determinants as well as experiences of violence and brutality such as rape continue to affect their mental health. In terms of policy, mental health issues are poorly prioritized in many of these countries, coupled with outdated legislation, scarcity in funding, inadequate training for staff and public awareness. Consequently, services are limited to provision by a few centralized institutions which makes refugees sought out traditional healers in line with alleviating the effects of stigma and discrimination (WHO, 2001). Therefore, this study will make holistic suggestions on psychosocial support interventions with a focus on the vulnerable sub-groups among the refugees in Kakuma Camp to substantially improve their mental health situation. This new knowledge will inform existing policy

on interventions that are inclusive and tailored to specific, exhaustive needs in addressing mental health of vulnerable populations at risk among refugees in Kakuma refugee camp and generate informed discourses on the creation of new policy.

1.6. The Scope of Study

A good number of refugees reside in camps while a few reside in urban areas. This study however focused on refugees living in Kakuma refugee Camp in the County of Turkana. It focused on the mental health of refugees by investigating the influence of psychosocial factors on mental health of vulnerable populations at risk.

To effectively pursue the study, I narrowed down the scope to mental health of vulnerable populations at risk since 2013 to date. This period was specifically selected for the study because this was the period when the camp was heavily populated and hence the living conditions were dire. The primary respondents in the study were household heads of the affected community. The study mainly targeted teenage mothers, people with disability (PWD) and/or chronic illnesses, orphans and the elderly since their vulnerability to psychosocial distress is heightened as compared to other segments of the refugee population. Nevertheless, all refugees are vulnerable. The major stakeholders in the study included humanitarian officers, national and county government officials of Turkana, Ministry of immigration officials and household heads in Kakuma Camp.

CHAPTER TWO

LITERATURE REVIEW

2.0. Chapter Overview

In this chapter, relevant literature on the influence of socio-economic factors on the mental health of refugees, the psychosocial well-being of vulnerable populations at risk among refugees as well as the effectiveness of psychosocial support strategies was outlined, in line with the research objectives with the view of identifying research gaps. This chapter also presents the conceptual model that was employed by the study.

2.1 The Concept of Mental Health among Refugees

Direct posttraumatic reactions to conflict and war can cause poor mental health to many refugees. In addition, such factors as post displacement that arise from loss of family or home, the settlement and cultural bereavement can cause poor mental health. Furthermore. Displacements into unfamiliar environments can also lead to depression, sadness despair or even disruption in terms of a person's ability to regulate their mood, to interact with others and to cope with daily life. (Wong *et al*., 2017). Recently, there have been reports on high prevalence rates of mental illness in most refugees' populations according to published literature (Smith *et al*., 2022: Knudsen et al., 2022; Foverskov *et al*., 2022).

2.1.1. Socio-economic, Demographic Factors and Mental Health of Refugees

There are several factors attributed to poor mental health amongst many refugees which span from socio- demographic characteristics that come because of displacement from ancestral lands, involuntary repatriation, and even restrictions in economic opportunities (Silove, *et., al* 2017). According to WHO (2001), anxiety and depressive disorders outweigh mental disorders where the former is quite common among women,

while men have been attributed to substance use disorders. This is a clear indication that depression rates are quite elevated or almost certainly twice as common in women as in men. Furthermore, this difference can be pegged on differences in age which technically appears among the young people but never reported in childhood (Steel *et al*., 2022). Again, there is also several symptoms in women, which are accompanied by higher rates of incidences of seeking help, alongside prescribed psychotropic medicine. Recently, reports indicate that substance use disorders are on the rise among women while suicide rates are on the rise in men (Hesse, 2020; Lynch *et al.*, 2020; Dragisic *et al*., 2015).

Males and females differ in biology which dictate how certain mechanisms predispose females to mental disorders more than men such as depression. Previous studies indicate that females twice as likely as men to fall victims of depression, somatoform disorders and even anxieties (Oliver *et al*., 2022; González & Vives, 2019). Elsewhere this concept can be attributed to the ever-fluctuating hormonal levels in women throughout their lives especially during pregnancy and at childbirth and even in menopause. The complexity of interaction of several social and biological factors between men and women have been explained with several attempts put forth which base the arguments on gender differences but still, the exact casual pathways around this concept are being debated (Duan *et al*., 2022; Patel & Kleinman, 2003). Young girls experiencing child marriage, for instance, become vulnerable to complications during pregnancy and childbirth because of early pregnancies. Girls under 18 years of age are more predisposed to severe complications when giving birth (Bhowmik *et al*., 2021; Sagalova *et al*., 2021), because their bodies yet are not designed to handle physical stress that comes with childbirth and therefore these increases their encounter with psychological

trauma alongside post-partum depression. Contrary to expectations, research has mainly focused on social factors which shape the trajectories of woman's lives while exploring gender inequality, lack of social support; unemployment limited power and even personal control. Furthermore, it has underscored the importance of sexual violence and domestic violence which mainly affects women (Oram, 2019; Patra *et al*., 2018; WHO, 2021).

Mollica (2001) argues that Cambodian refugees', illustrated that rates of acute depression are at 68% and those of PTSD are at 37% whereas this kind of difference is slightly higher than those found in general population which are depicted as 10% and 3% respectively. Furthermore, epidemiological studies or mental health in contemporary community's fallen victims of war in Afghanistan has illustrated that there is considerably a high prevalence of depression PTSD and anxiety (Scholte *et al*. 2004). On this scale however, women expressed poorer mental health status than men and so did the disabled. Furthermore, feelings of hatred were elevated at 84% whereas nationwide prevalence of depression was slated at 68% anxiety at 72% and PTSD symptoms at 42%.

According to Stavropoulos & Samuels (2015), there are high levels of violence in the post conflict period which lead to the normalization of violence, and weapons and as well as impunity. Reports indicate that these experiences have profound effects on women's mental health (Oram, 2019; Patra *et al*., 2018).Consequently, women refugees experience higher rates of trauma attributed to pre-migration as well as loss, which overtime contribute to trauma that then leads to complexity of women's health and mental issues. These studies are relevant to the current one since they highlight how forms of conflict lead to mental disorders among refugees who are vulnerable

populations at risk. Stavropoulous & Samuels (2015) study specifically points out that women suffer post-traumatic disorders but fails to point out how conflicts in camps contribute to the same. The current study seeks to address this gap.

Refugees' experiences span from human rights violations, threat to life, traumatic loss, eviction, and family displacement (Smith *et al*., 2022; Jelle, *et al*., 2021; Orzechowski *et al*., 2021). Therefore, women are constantly being exposed to stressful living conditions which include disease outbreaks, displacement,food shortage, exposure to violence, disrupted networks and weakened infrastructure, which pose a risk to mental health illnesses. Buhmann (2014) adduces that women's continuous experiences with stress related conditions to settling into a new culture environment is due to isolation, poverty, intolerance on a regular basis.

Overtime, war-related violence and displacement have subsequently affected mental health of the refugees and asylum seekers. To date however in the Kakuma refugee camp, there is limited information on comprehensive epidemiological data on mental health concerns and this is due to limited research as well as poor data collection routine in the involved health centers. Furthermore, there is high risk factors in line with the mental health of refugees in Kakuma, which lead to mental disorders at the area in the context of property and loss of people, disrupted relations and social networks, severe traumatic experiences, insecurity displacement and the certainty about the future as well as substance abuse (UNHCR, 2016).

From this review, it is clear that like any other refugees and asylum seekers, refugees in Kakuma Camp undergo problems attributed to mental health, because of war-related violence they experienced back in their home countries and ongoing social stressors in

the camp. So far, there is no clear data on mental health of vulnerable populations at risk in Kakuma refugee camp. The study, therefore, aimed to determine how socio-economic factors influence mental health of the vulnerable populations at risk in Kakuma refugee camp.

2.1.2. Socio-economic Factors as part of Psychosocial Influence on Mental Health of Refugees

Physical and mental health are not only determined by biological factors but also social factors. The risk for developing mental health illnesses is greater for certain groups of people who are discriminated against as a result of broader social, economic and political inequalities. Members of groups with less access to power, material resources, and policy making are more likely to suffer from mental disorders (Hynie, 2018).

Displacement is a key factor for susceptibility to mental health disorders as it predisposes the victims to socio-economic disadvantages. In this regard, poverty levels get heightened, and opportunities become limited which means inadequate income that is generated. Furthermore, inability to access resources alongside economic stresses ultimately forms a collection of factors which frustrate refugees (Malm *et al*., 2020; Lueders *et al*., 2019). Such losses contribute to emotional distress amongst refugees (Blackmore *et al*., 2020; Grasser, 2022). Research has well established the implication of traumatic effects of war-related violence on the mental health of displaced populations. However, certain studies suggest otherwise; for instance, these studies done by (Groen *et al*., 2018) and (Chen *et al*., 2017).

When controlling for Post-migration living problems (PMLPs), pre-migration post-traumatic experiences (PTEs) were not substantially linked with psychopathology in a

study of asylum seekers in the Netherlands (Groen *et al*., 2018); however, a high correlation was found between PMLPs and psychopathology.

Another study found that the main causes of mental health issues in immigrant and refugee populations were post migration stressors associated with relocation (Chen *et al*., 2017).

Further, another study found that the main causes of mental health issues in immigrant and refugee populations were post migration stressors associated to relocation such as loneliness, finding a suitable job, adapting to new cultural norms, may contribute to mental health problems even years after arrival in to the camp when challenges experienced in building a new life are not coped with adequately (Chen *et al*., 2017; Hassan *et al*., 2016; Phinney *et al*., 2001; Porter & Haslam, 2005).

Earlier, Bhurgra & Becker (2005) illustrated that there are psychosocial components which might protect individuals from development of mental illnesses or on the other hand, caution them against development of psychopathology. These components include social involvement, employment, poverty, race, racism housing, and even access to proper medical care.

Although causes of mental disorders like psychological (childhood development), social (natural disasters, urbanization, poverty) and biological (age and sex) exist. There is inadequacy in distinguishing among the three causes and attempts have been made to do the distinction at artificial level, which proves as an obstacle to complete understanding of mental disorders (Wainberg *et al*., 2017; WHO, 2001; Telles-Correia *et al*., 2018).

Earlier, Wessells and Monteiro (2004) explained how war contributes to shattering of peace and trust in each society, which ultimately creates division amongst the members, and consequently builds up a societal norm utmost violence. Martin Baro, (1989) notes that such changes contribute to differences in a formal setting and therefore normalization of violence in attempt to resolve such conflicts. Nevertheless, it's important to uphold traditional culture and practices which might prove important to the displaced populations in this way, there are high chances of maintaining continuity of that culture which could be crippled by disruption of family support, by loss and an end to community structures and social networks (Choi *et al*., 2022; Rosas *et al*., 2022).

2.1.3. Social Support, Influence, Connections, and Integration among Refugees

Khan & Amatya (2017) claim that refugees continue to experience marginalization, poverty, and reliance because of the lack of cohesion in their new society, all of which are factors in poor physical and mental health. Language hurdles, poverty, and lack of acquaintance with the local surroundings and healthcare system only make this situation worse. Stressors associated with poor mental health frequently center on racism, discrimination, and social alienation (Wong *et al*., 2017). Before and during their departure, asylum seekers face traumatic episodes (TEs) that include poor access to food and shelter on regular basis, medicine which may make one fear for their lives and of their related ones forcibly separated from family, seeing violent acts, being shot at and bombed, residing in a war area, being imprisoned, and residing in a refugee camp (Sigvardsdotter E, et *al*., 2016). While 86% of Turkana households had to deal with not having enough food or the money to buy it, 83% of refugee households already experience severe food insecurity (WFP, 2016).

The loss of social support and isolation that occur from being separated from one's family and community during a displacement are regularly identified to be among the most significant stresses impacting refugees (Purgato *et al*., 2017; Miller, & Rasmussen, 2017). Even though these camps are frequently crowded, residents may know few other people, have little in the way of social assistance, or be mixed in with other already existing ethnic groups they find difficult to relate to (Lupieri, 2021; Bohnet, & Rüegger, 2021; Andrade *et al*., 2001). The disintegration of communities that frequently follows displacement exacerbates the loss of social support (Wachter, *et al*., 2021; Abi Zeid Daou, 2022; Hynie, 2018; Doma *et al*., 2022). Women's, church, and youth clubs are examples of community organizations that frequently fail to adapt to displacement because they offer- besides social support – other activities that give life purpose and continuity. Wessels and Monteiro (2004) had previously made the point upon relocation wholly, the communal functionality is disrupted. Furthermore, the planning and meetings at communal level goes away and what is left is hopelessness and uncertainty.

The primary source of support for refugees with familiar social and other networks have frequently been destroyed by conflict is their family (Neville *et al*., 2022; Mak, & Wieling, 2022; Papadopoulos *et al*., 2022). Conflict, on the other hand, also upends family systems, resulting in family members being separated, hurt, or killed. Parents are frequently too burdened by their recent struggles and terrible experiences to properly care for and support their children, even when families are still together (Frounfelker *et al*., 2020; Fegert, 2018; Vaghri, 2019). Consequently, the refugee family may exhibit many forms of dysfunction due to its losses and instability (Neville *et al*., 2022; Mak, C., & Wieling 2022).

2.1.4. Events of Social Disparity among Refugees

Incidence of mental disorders can be estimated before actual combat, during combat, after combat, or after resettlement (Buchmüller et al. 2020; Fazel *et al*., 2012). Furthermore, the limited access to health care and schools, disruption of public infrastructure is as a result of preflight phase. Children and their caregivers face severe violence-related adversity, including torture, witnessing firsthand violence, and perhaps family members die through conflict and war. Similarly, refugees may seek refuge in mass camps while fleeing. They may experience malnutrition, illness, limited access to health care and clean water, and loss of privacy (Chuah *et al*., 2018; Ankomah *et al*., 2022; Dayne, 2016). A major problem facing Western countries which actually host refugees from the Arab countries is, Muslim refugees are often associated with terrorism since the former 9/11 terrorist attacks as Eid, (2014) report. Therefore, these experiences generally produce a sense of deprivation and severe intellectual disability.

2.1.5. Economic Hardship among Refugees

In addition to psychosocial barriers, these refugees also are faced with social hardships, environmental, economic, emotional, and psychological hardships (Sengielge, 2020; Silove, 2017; Haaken and O'Neill 2014). These problems stem from forced for of displacement, local violence, constant exposure to war and terrorism, altogether having a negative impact on the mental and physical well-being of these refugees (Grasser, 2022; Miller & Rasmussen, 2017).

Furthermore, unemployment has been regarded as a one of the main risk factors for mental disorders (Crumlish *et al*. 2010). Job shortages prevent full integration into new societies and environments (Ryan *et al*. 2008). In the Middle Eastern, a study of young refugees with unemployed parents in the host country observed that these young

refugees immensely suffered from peer hostility, including insulting and abusive comments (Xie *et al*., 2022; Patseadou *et al*., 2022). Elsewhere, it is estimated that there are at least 500,000 Syrian refugees residing in Jordan (UNHCR). These refugees have very limited employment opportunities and often work in the informal sector (Wells *et al*., 2016). Integration is guaranteed if programs in the areas of asylum policy, employment, education, and housing are continuously developed and improved (Priebe *et al*., 2016).As first reported by Christensen (2006), often based on the mismatch between the qualifications of the refugees and the jobs available in the host country, leading to a distorted public perception of Muslims, most mainstream media portray Muslims negatively.

2.1.6. Implication of Social Disparities and Economic Hardship of the vulnerable Populations at Risk of Mental Health in Kakuma Refugee Camp

A constant exposure to trauma is a significant risk factor in line with bearing such psychiatric disorders as post-traumatic stress disorder (PTSD), depression, and anxiety disorders (Böttche M, *et al*., 2016). The effects of war-related violence and other disasters have a profound impact on the well-being of refugees. Their experiences relate to the days of displacement: poverty from unemployment, lack of essentials and services, continued risk of violence and exploitation, loss of family and community support, isolation and discrimination, and uncertainty about the future. It is exacerbated by stressors.

Much of the refugee literature shows an unusually heightened prevalence rate of mental instability in refugee populations (Smith *et al*., 2022; Knudsen *et al*., 2022; Feyissa *et al*., 2022).

Refugees are particularly at risk of mental disorders such as substance abuse, psychosis, depression among others have experienced (Qureshi *et al*., 2022; Ventura et *al*., 2022). Fanzel, Wheeler, and Danesch (2005) in a previous systematic review found that in adult refugees sampled from seven different countries, 9% were suffered from PTSD and found that 5% were eligible for major depression. Hindrance (Keller *et al*., 2006).

Although a few refugees meet diagnostic criteria for specific mental illnesses, where many are deeply affected by their experiences (Priebe *et al*., 2016). In a survey of Sudanese refugees in Australia, fewer than 5% of them met criteria for PTSD screening, but 25% of them reported having clinical levels of emotional distress. (Schweitzer, Melville, Steel & Lacherez, 2006). According to Porter & Haram (2005), they argued that mental illness and suffering commonly affect refugees and thus their ability to change and develop during resettlement. To better grasp the impact on refugee mental health, the resettlement process is not well-known in the context of trauma and associated events. Impact of resettlement (Porter & Haram, 2005). Moving process stress with specific risk factors associated. Inadequate social support, mismatched performance and expectations, economic hardship, racism and harassment, lack of access to adequate housing, health care and religious practices can lead to low self-esteem, inadequacy, and poverty and can negatively impact their mental health (Fukui *et al*., 2022).

Even during the moving process, specific risk factors for mental health effects at each stage is still enormous which predispose refugees to more mental health diagnoses. Moreover, Pre-immigration factors that shapes the development of psychopathology stem from the personality, trauma and the persecution they are experiencing or had gone through. Moreover, migration factors predisposing refugees to mental illness include

grief and mismatches between expectations and performance (Fukui *et al*., 2022). Post-migration social and cultural adaptation can have a significant impact on resettlement. Earlier, Porter and Haram (2005) observed that institutional placement, access to culture, economic opportunities, sites of refuge, repatriation status, and stage of ongoing conflict all affected mental health outcomes after displacement. Those in the post-migration or resettlement stages may be at the core of mental illness if they are not accepted by their host countries and experience rejection, marginalization, and/or lack of self-esteem and social support (Sagbakken *et al*. al., 2022; Bempong *et al*., 2019; Bhui, 2022).

A previous WHO study (2001) observed that the global burden of disease (GBD) from such psychiatric and behavioral disorders as bipolar disorder, depression, schizophrenia, psychosis, and substance abuse ranges from 12% in the United States. This estimate is partly based on projections that by 2020, violent conflict will rise from 16th to 18th and from 28th to 12th leading cause of disease and violence. Psychosis and mood disorders are common in affected societies deep in conflict (Silove, Ekblad and Mollica, 2000). People who have been in a war zone and have been uprooted from their homes may have mental and emotional suffering, but many make a full recovery once some time has passed. It is important not to underestimate the influence of evacuation-related stressors on refugees' coping capacities, even though attention is generally focused on the psychological impact of traumatic experiences had before to evacuation. There is ample evidence to support claims that the stressors associated with displacement affect the psychosocial well-being of refugees' at least as much as previous trauma (Miller & Rasmussen, 2017; White & Van der Boor, 2021).

Wessells and Monteiro (2004) observed that psychologically debilitating effects of life in refugee camps (usually desperate, lonely and boring) even when basic needs are met. Forced idleness in refugee camps has been described as particularly distressing (Tsegaye *et al*., 2022; Chiumento et al., 2020). In this case, the long-term repercussions of staying in refugee camps on mental health are very severe. Long-term displaced people have to deal with the strain of living in refugee camps and the fear of not knowing what the future holds (Phillimore, J., & Cheung, 2021; Hameed *et al*., 2018). Mental health and poverty, for instance, have a complicated and nuanced relationship. Mental disease risk factors include poverty and its corollaries such as inadequate education, unemployment, and homelessness. The increased prevalence of mental problems among people of lower socioeconomic position is widely recognized in industrialized countries, and two processes have been proposed to explain this.

Causal mechanisms hold that deprivation generates high levels of personal and social stress and leads to disability, whereas drift theory holds that people who develop disability fall into poverty or are unable to rise out of poverty (WHO, 2001; Lund *et al*., 2011).

2.1.7. Mental Health Impacts ranging from pre- to post Migration Experiences of Refugees in Kakuma Camp

Women in Afghanistan have significantly worse mental health than men. In general, women are more likely than men to suffer from mood and anxiety disorders and twice as likely to be impoverished, oppressed, and forced into subservient positions (Sultana *et al*., 2022). These factors increase the risk of chronic emotional problems. Bouta, Frerks, and Bannon (2004) found that the gender dimension of conflict included child soldiers and ex-combatants.

They add that while there are international norms in place for dealing with child soldiers, not enough attention has been paid to the specific needs of girls and boys who have been involved in the conflict. Our programs typically assume, without saying so explicitly, that all young soldiers are male. Although women rarely engage in direct combat, they often serve in support roles in militaries (especially irregular armies), where they are often used as sexual slaves or subjected to severe abuse. Those who exhibit hesitancy run the risk of being beaten, hurt, or even killed. Girls who survive being held captive typically face social isolation and stigma when they return home. Sexually transmitted diseases and sexual assault at the hands of their own children are two major factors contributing to the marginalization of many young women.

Supported by Park *et al*., (2022), Engdahl *et al*. (2003), a previous study showed that women who participated in combat were sometimes more likely than men to experience symptoms of psychological distress. Additional burden of physical assault or harassment, with varying levels of severity depending on the situation and culture. For example, an American woman who served in the First Gulf War was three times more likely than a man to suffer from her PTSD (Wolf, Sharkansky, and Reed 1998). In some societies, widows are stigmatized and discriminated against. As such, special and focused efforts may be required to recognize and address the mental health and psychosocial support needs of widows (Narayan *et al*., 2000). Therefore, especially if a woman fails to express her views and needs in front of men and acknowledges psychological or psychosocial distress, which can lead to stigma and discrimination, gender her focus her group (widow, female) can be used to identify gender needs.

Sexual violence is a pervasive global public health concern that lacks appropriate, adequate and full response in most countries around the world. Sexual violence is a

particular problem during armed conflict and in areas of displacement. Women and children of the general population are the most numerous and often subject to abuse, making them vulnerable to exploitation, violence and abuse because of their gender, age, and social status. Since the 1990s, humanitarian organizations have had a concern to the issue of sexual violence and this lead to WHO and UNHCR jointly developing guidelines to enable the development of clinical treatment protocols aimed at alleviating the impact of rape in displaced areas.

Ward and Vann (2002), state that women are the primary targets of sexual violence during times of crisis. Forced marriage, intimate relationship physical abuse, child sexual abuse, forced prostitution, and other forms of sexual exploitation all occur more frequently to women than men because of their susceptibility. There is a greater potential for many sorts of violence. While the disintegration of social norms and regulations may make some acts of sexual assault appear random, they may actually be part of a larger plan to oppress specific communities or ethnic groups. It's important to keep the context of people's reactions while discussing sexual violence. Many women suffer many different kinds of losses during most conflicts, including sexual assault. Which generic or culture-specific therapies are best is determined by sociocultural factors including community resources.

It's also possible that preexisting mental health problems made some women more susceptible to the crisis than others. Depression, anxiety, substance abuse, and shifts in health care are just some of the mental health issues that affect women who have experienced sexual violence (WHO, 2000). When sexual abuse is brought to light, survivors of such violence often find themselves on the outside looking in. Women's personal relationships and, in some situations, their ability to care for children can be

negatively impacted by sexual violence (Bou-Karroum *et al*., 2020; Tappis *et al*., 2016). Fortunately, very few people suffer serious emotional or social issues. We need more information about the aspects that can contribute to resilience in order to enhance humanitarian support.

Other factors such as family ties, beliefs, clannism, and culture often influence people's behavior, especially during and after conflict. Most often the victims are women. Relatives are obliged to support each other materially and psychologically. The trauma and hardships of persecution and flight make assistance to refugee women especially important. Refugees consistently show remarkable resilience in the face of adversity, but lonely refugees must rely more on outside providers for help and protection. Self-help efforts of refugee families has redoubled efforts by external actors to call for self-reliance programs for adult [refugee] families to improve their capacity to support dependents, recognized by the UNHCR Executive Committee (United Nations General Assembly, 1951).

This overview shows that even within camps refugee women are exposed to rape, gender-based violence, sexual slavery, cultural discrimination, and other experiences of conflict. These negative experiences take a toll on their mental health, leaving them to suffer from trauma, depression, anxiety, and other mental disorders.The selected interventions are general and therefore do not address the wide range of psychological problems faced by women and girls in Kakuma refugee camp.

2.2. Knowledge and Attitudes about Psychosocial Wellbeing and Mental Health among Refugees in Kakuma Refugee Camp

The prevalence of mental health issues among refugees is hard to predict. This is due to the fact that it relies heavily on the personal narratives and collective trauma of

migrants. However, estimates of PTSD among established refugees range from 10–40% (Turner *et al*., 2003; Fazel *et al*., 2005), while estimates of severe depression among settled refugees range from 5–15%. Several studies have identified a wide range of mental health problems in youngsters, and they all seem to have a negative correlation with one another. Major depressive disorder and post-traumatic stress disorder both have a higher prevalence among young people (ranges of 50-90% and 6-40%, respectively; Lustig *et al*., 2004; Barenbaum *et al*., 2004).

The frequency of post-traumatic stress disorder (PTSD) and depression among Iraqi refugees who relocated to Western nations was studied in a review by Slewa-Younan et al. (2015). They discovered that sadness (24.3–37%) and PTSD (8%) were more common among Iraqi refugees. 75%). High rates of post-traumatic stress disorder (PTSD) (27–83%) and depression (37–44%) have also been found in studies of Syrian refugees in refugee camps in the Middle East and neighboring countries such as Lebanon (Kazour *et al*., 2017; Naja *et al*., 2016), Iraq (Ibrahim and Hassan 2017), and Turkey (Chung *et al*., 2017; Acarturk) *et al*., 2018; Alpac *et al*. 2015). Anxiety (40%), post-traumatic stress disorder (32%), and depression (47%). (Javanbakht *et al*., 2019)

2.2.1. Psychosocial Wellbeing of Refugees

According to Roberts & Browne's (2011) literature review, forced migration has a significant negative impact on mental health and that populations affected by wars in low- and middle-income countries have distinct mental health risk factors from those in high-income countries. According to Porter & Haslam (2005), a meta-analysis of 56 reports on mental health among forced displaced people revealed that humanitarian intervention to address these effects does improve the mental health of refugees. The experience of fleeing War violence, and subsequent post-migration tribulations have

been attributed to the disturbance of psychological well-being of forcefully displaced individuals (Hirani & Wagner, 2022; Ezard, 2012). At this, these effects could also be the reason why substance abuse was heightened in some communities of refugees of where conflict was rampant. Rajbangshi *et al*., (2021). Children and adolescents are particularly vulnerable to war and displacement due to their developmental status and reliance on adults, but they are also considered to be the most resilient in the face of adversity (Rizzi *et al*., 2022; Maloney and other, 2022). Although many displaced children and adolescents continue to function normally, even when they have mental health issues, extensive research has documented severe and long-lasting psychological effects (Alzaghoul *et al*., 2022; Bürgin and other, 2022).

2.2.2. Physical and Social Indicators of Psychosocial Trauma among Refugees

According to Qureshi *et al*., (2022), refugees are particularly susceptible to such psychiatric disorders as depression, substance abuse, post-traumatic stress disorder, and psychosis that are frequently linked to the psychological and physical abuse they endured. 2022; Ventura and others, 2022). O'Neill (2014) says that in addition to psychosocial challenges, they also face social, economic, environmental, emotional, and psychological challenges. These problems arise when refugees are forced to flee their homes, are subjected to war and terrorism, and are subjected to violence in their own regions (Patanè *et al*., 2022; Meurling and others, 2023).

2.2.3. Emotional and Psychological Indicators of Psychosocial Trauma among Refugees

Forced displaced populations' psychological well-being has been found to be impacted by war violence, the experience post-migration challenges (Hirani & Wagner 2022, Rajbangshi *et al*., 2021). Children and adolescents are particularly vulnerable to war

and displacement due to their developmental status and reliance on adults, but they are also considered to be the most resilient in the face of adversity (Rizzi *et al*., 2022; Maloney and other, 2022). Although many displaced children and adolescents may seem normal, even when they have mental health issues, extensive research has documented severe and long-lasting psychological effects (e.g., Alzaghoul *et al*., 2022; Bürgin and other, 2022).

2.2.4. Indicators of Anxiety Disorder among Refugees in Kakuma Refugee Camp

Furthermore, (PTSD), anxiety disorders, depression, and behavioral issues are just a few of the psychological symptoms that have been observed (Oyekale, 2022). Additional daily stressors (Blackmore *et al*., 2020), such as discrimination, dependency, and socioeconomic hardship, have been linked to depression in refugee children following displacement. According to Derluyn, Mels, & Broekaert (2009), a significant predictor of mental distress in displaced youths appears to be the absence of parental support. Female gender is typically found to be a significant factor that has a negative impact on psychological well-being among the individual characteristics of children studied, whereas findings regarding age remain inconclusive (Morina, *et al*., 2018; Kane and co., 2014).

2.2.5. Indicators of Depression among Refugees in Kakuma Refugee Camp

Depression is associated with an increased risk of coronary heart disease (Oyekale, 2022). According to a meta-analysis, people with depression have a higher relative risk of developing heart disease than people who don't have depression. Depression is linked to an increased risk of stroke mortality and morbidity as well as a stroke predictor. A person is more likely than a person with less severe symptoms to have a stroke within ten years if they have severe depressive symptoms. It also appears that depression is

associated with heart attacks and myocardial infarctions; Major depression is associated with a fourfold increased risk of myocardial infarction (Karadag *et al*., 2021; Kane *et al*., 2014). However, according to Fazel *et al*., (2005) research on settled refugees, PTSD affects 10–40% and major depression affects 5–15%. 2005; Turner *et al*., 2003). A number of studies have documented a variety of mental health signs and symptoms that children experience, indicating that these disorders have a greater impact on refugees who are younger. Barenbaum et al., (2004) found that children and adolescents are more likely than adults to develop PTSD (50–90%) and major depression (60–40%). 2004; Lustig *et al*., 2004).

2.3. Pre-migration to Post-migration Experiences of Refugees

There are three phases to the refugee journey: before, during, and after migration (Keyes & Kane, 2004; Bhugra & Jones, 2001; Khawaja and other, 2008; Muzueovic, Miller, Worthington *et al*., 2002). The stage of the process of relocation during which refugees continue to reside in their home country is known as process pre-migration. The process of relocation of refugees during their journey between home and host countries is known as the in-transit period, and it is frequently spent in a refugee camp (Papadopoulos *et al*., 2022; Posselt and others, 2019; Keidar *et al*., 2019). The final phase of refugees' relocation to a host nation, where they may seek asylum, is known as post-migration. Refugees are acclimating to their new community and society after migration.

In pre-migration, the relocation process during which refugees decide and prepare to relocate to a safe nation happens (Papadopoulos *et al*., 2022). Physical and psychological trauma, such as the loss of a loved one, incapacity to lead a day-to-day life, and being denied necessities, are clear signs of distress in the pre-migration period

(Feyissa *et al*., 2022; Mwanri *et al*., 2022). A significant factor in the mental health outcomes seen in refugee populations is the pre-migration trauma. Furthermore, the physical transition and journey is the middle stage of the relocation process known as in transit (Mwanri *et al*., 2022). UNHCR (2011) reports one third of the refugees who were living in refugee camps as per 2011 were refugees who were in transit.

Even though refugee camps are frequently thought of as a first point of safety, there are always concerns and dangers there, such as illness and violence. Due to interethnic strife, sexual violence, and disease epidemics, refugee camps are frequently just as dangerous as countries of origin and may have higher mortality rates than those of those countries (Adams, Gardiner, & Assefi, 2004p.1). Because refugee protection is frequently only temporary, the in-transit process poses a unique threat to refugees. Fear is frequently accompanied by the stress of living in legal limbo (UNHCR, 2010). Instability and worry about the future are two of the main causes of distress while traveling. According to Feyissa *et al*., (2020) refugees feel unsafe, fear being returned to their home country, or fear being killed while traveling (Mwanri *et al*., 2022).

When refugees arrive at a developed host country and apply for asylum, they enter the third and final stage of relocation: post-migration. Here, they are required to learn the social and cultural norms of their new home and are gradually integrated into society (Mwanri *et al*., 2022). Furthermore, social isolation, identity confusion among others are the primary causes of post migration distress (Allen *et al*., 2021; Feyissa *et al*., 2022; Goodkind *et al*., 2021; Belau *et al*., 2021). According to a study of Bosnian refugees who had moved to Chicago, their memories from before the migration served as both a source of comfort and a point of reference when evaluating their experience in Chicago; Refugees' perceptions of their post-migration experiences were influenced by this

contrast of experiences (Goodkind *et al*., 2021; Belau *et al*., 2021). There are numerous factors that influence refugees' ability to adapt quickly, in addition to the journey they have taken to a host nation. Bereavement, assimilation, acculturation, and deculturation are all prominent post-migration issues in refugee populations (Mwanri *et al*., 2022).

However, the psychological well-being of refugees can also be predicted by looking at post-migration adjustment and distress. Post-migration factors such as job difficulties, social isolation, and acculturation are linked to higher rates of depression, anxiety, and somatic disorders (Al-Adhami *et al*., 2022; Smith *et al*., 2022). In addition to causing distress, post-migration issues contribute to the psychopathology that refugees exhibit. During the relocation process, refugees' mental health can be negatively impacted by the fear and persecution they endure. Post-migration factors are crucial in determining whether a mental disorder (depressive disorders) will become chronic once it manifests in a refugee (Bogic *et al*., 2015).

During the relocation process, refugees are subjected to a variety of stressors that increase their risk of mental illness. A lack of social support, losses in religion and culture, identity confusion, acculturation, and cultural adjustment are among these stressors. Mental illness is particularly common in refugee communities because of these weaknesses. Mental health is affected by refugees' experiences throughout the relocation process, from pre-migration to post-migration. Throughout the relocation process, they experience severe distress in a variety of forms that affect their mental health. These difficulties differ based on the stage of the relocation process—before, during, or after migration. Social, cultural, and health care system influences can be examined at various levels of these pre-migration to post-migration factors (Fukui *et al*., 2022; Levy-Fenner and others, 2022; *et al*., Peters-Nehrenheim 2022).

The frequency of mental health issues in refugee populations has been seen throughout the relocation process, making it imperative to investigate the primary elements which lead to- and protect against mental health concerns so that suitable therapies may be administered. Mahin Delara (2016) claims that a number of factors, including socioeconomic status, a person's load of responsibilities, difficulties with acculturation and resettlement, and language barriers make it difficult for people to access services quickly, have contributed to the decline in the mental health of female refugees. Despite differences in circumstances, refugees often suffer emotionally and psychologically from their forced migration and the persecution they fled (Porter & Haslam, 2005). As a result, a variety of internal and external factors can have an impact on female refugees' mental health.

The idea that a person can only belong to one nation, learn one language, and understand one culture is false. If a refugee is only deemed fully integrated after adopting all parts of a cultural identity traditionally associated with nationals of the host community (European Council on Refugees and Exiles, 2005), then integration becomes impossible, says the ECRE. When refugees are of the same cultural and linguistic group as the local population, the locals are more likely to understand and sympathize with their plight. Numerous cases exist of refugees being given safe haven in private houses.

Over 400,000 refugees are living with relatives or acquaintances in the Federal Republic of Yugoslavia. However, ethnic differences can be a source of friction. Traditional animosities or conflicts within groups may have negative effects on the mental health of women. Even if this isn't the case, linguistic and cultural impediments to communication and understanding can still be substantial roadblocks. UNHCR (1997) notes that refugees from one particular ethnic group may shift the demographics of a

community and fuel tensions. Amnesty International's interviews with refugees revealed widespread violence between members of various clans and between Somali, Ethiopian, South Sudanese, and Congolese refugees. Acceptance and assimilation to a new country, therefore, is a long and winding road. Getting used to a new environment can take years. Many immigrants are able to start over in their new nation and go on to tremendous success. Some of them, especially the elderly, will never be able to catch up because they lack the knowledge, experience, and flexibility to deal with major changes.

2.4. Psychosocial Support Strategies Applied to Mitigate Mental Health Disorders among Female Refugees

Human rights issues are indissolubly linked to mental health matters. The discrimination stigma, and violations of human rights that people with mental disorders face are severe and pervasive. As shown in this instance, it is because of the widespread perception of the absence of treatment options for disorders. A surefire way to treat mental disorders is to use effective prevention. However, human rights topics extend beyond the precise violations that individuals with mental disorders face. In fact, mental disorders may be strongly influenced by restrictions on the fundamental human rights of vulnerable communities (Bhugra *et al*., 2015; Ngui and others, 2010). As a result, it should not come as a surprise that many effective preventative measures are in line with social equity, equal opportunity, and concern for the most vulnerable members of society. Examples of such interventions include efforts to improve nutrition, expand access to primary education, combat racial and gender-based discrimination, and guarantee basic economic security for all. Many of these interventions are worthwhile to apply regardless of the strength of the evidence for their effectiveness in avoiding mental disorders (Rahman *et al*., 2021).

Nonetheless, delaying the implementation of necessary social and health reforms because further research is needed on their cost-effectiveness is unacceptable. New ways of thinking about the evidence are needed for designing and implementing these initiatives. To capture the range and complexity of the consequences, these approaches should incorporate stakeholder analysis and qualitative methods from the sociological, anthropological, and other humanities sciences. War and violence, whether between people or countries, pose a serious and all too common danger to people's psychological well-being. By taking preemptive efforts and adapting humanitarian aid to better accommodate mental health needs, experts in the field of mental health may be able to mitigate the destructive impacts of violence (WHO, 2004). Mental health experts may be able to mitigate the effects of violence, but bigger societal actions are necessary to prevent it (WHO, 2004).

Currently, with regards to conflicts, there is incidence of internal and increasingly target civilians, most of whom are women and children, who are frequently targeted specifically for their gender. Women and girls in armed conflict face widespread sexual violations violence, and slavery, and forced marriage, according to recent UN human rights reports. Other related violations include kidnapping girls for use as child soldiers or laborers or enslaving civilians, particularly women and girls. For several years, the United Nations has been very aware of how women and girls are treated. “The Guidelines of the Protection of Refugee Women” were published by the United Nations in 1991. The United Nations' recognition of refugee women's rights was a significant milestone. The Guidelines provided UNHCR with the guidelines it needed to create programs for its staff and partners. The unsafe physical outline of refugee camps and procedures for the distribution of aid were among these measures, which were intended

to help lessen the vulnerability of women to sexual violence. This was a step in the right direction toward ending gender-based violence (GBV) in camps, but again, issues like funding keep these measures from being a realistic option.

The UNHCR released the report Sexual Violence Against Refugees: Guidelines for Response and Protection This publication was intended to serve as a guide for UN agencies and other governmental and NGOs working with refugees. The guidelines were updated in 2003 to include not only refugees but also people who have been internally displaced (IDPs). “The Guidelines for the Protection of Women and Girls,” a new preventative approach to the issue of sexual and gender-based violence, was the UNHCR's most recent publication of guidelines. Another UN treaty, the 1984 Convention against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment, or The Torture Convention, falls in line with abuse of women but again overlooks important points that government officials can use to protect GBV. According to the convention, torture must be initiated, consented to, or acquiesced to by a public official, essentially authorizing these acts with officer’s approval. Amnesty International and other human rights groups focus their research on government abuse.

The Geneva Convention Relating to Statues of Refugees of 1951, The Protocol Relating to the Statue of Refugees of 1967, Organization of African Unity Refugee Convention of 1969 (OAU), and Universal Declaration of Human Rights are other helpful conventions and guidelines that have helped protect refugee women over time. Although these conventions do not specifically address girls or women, they are still regarded as guidelines because they provide general protection for refugees of any gender. Additionally, the government of each nation that takes in refugees has a significant impact on whether and how these guidelines are implemented.

Amidst the concern, the approach to better address women health in such emergencies comes down to the start and the whole process of attending to their rights. Furthermore, services, goods and health facilities should be accessible without bias in line with evaluating the implementation of their rights. It also means that we need to work hard to make sure that health facilities, products, and services are acceptable, that they are sensitive to gender and life-cycle requirements, that they respect confidentiality, and that they improve people's health. Finally, quality is a crucial criterion that considers things like skilled health care, staff, unused drugs, and high-quality equipment.

Due to the all-encompassing nature of the right to health, it is necessary to provide resources beyond medical care to address the determinants of health, such as the availability of clean, adequate sanitation potable water, a sufficient supply of safe food, nutrition, and shelter, a conducive environment, and knowledge about sexual and reproductive health. Specific extra considerations relating to women's right to health are addressed by the United Nations Convention on the Elimination of All Forms of Judgment Against Women and its general guidelines in line with gender-based violence, HIV/AIDS, and health in general. Access to reproductive health services, health education, family planning health information for teenagers, and the importance of including a gender perspective in all health programs are all additional factors to think about.

Principles of participation and accountability, strengthening the ability of rights holders to claim their rights and responsibility bearers to carry out their obligations, equality, and non-discrimination are all central to a human rights-based approach to programming. Many humanitarian actors lack the knowledge and experience to prevent and respond to sexual violence, despite the recommendations made in the

UNHCR/WHO guidelines and other related publications. A significant portion of humanitarian organization personnel and leadership also view efforts to combat sexual abuse as a luxury or fashionable, rather than a necessity, for saving lives. The response to sexual abuse consists of services designed to alleviate the trauma experienced by survivors and prevent any additional harm from occurring. Examples include health care, mental health services, access to the judicial system, and other forms of protection. The healthcare industry has the ability to give lifesaving treatments. However, post-rape care services that meet the basic standards are still the exception rather than the rule in refugee situations. The lack of expertise, resources, and financial support are only a few of the many contributing factors.

Because a few dedicated healthcare providers are available, health care for sexual violence is frequently implemented in humanitarian settings. One instance took place in two distinct refugee camps in Thailand. The refugee women's organizations began collaborating closely with two separate reproductive health nurses. The refugee women recognized that sexual violence was a serious issue, but few survivors reported the abuse due to a lack of support services, fear of retaliation, and social stigma. Further, they established informal networks for receiving reports about sexual violence and providing survivors with life-saving medical care over time, gaining the trust of the women.

In the Thai-Burma border, the nurses established a basic health care response to sexual violence using the hospital’s stock for STIs, wound care, and emergency contraception. After a few years, the networks are still in place, and survivors of sexual violence in these camps receive comprehensive, confidential, and compassionate health care as well as emotional support. When the established and formal health and safety system

does not respond appropriately, individual efforts and informal efforts can produce positive results. In the absence of a fully functioning interdisciplinary and interagency team dealing with sexual violence, informal efforts support survivors' reintegration into the community and improve their health status, both of which are vital lifesaving measures. Intervention strategies must be integrated and implemented at multiple levels because responses to sexual violence are complex and may affect multiple health domains, including social health. Sadly, services are often dispersed, and there are programs that treat a single issue, like post-traumatic stress disorder or the so-called rape trauma syndrome. Too frequently, rape survivors have access to physical care but not mental health care, or vice versa.

An integrated care system should be used to treat both the mental and physical aspects of rape. The WHO Department of Mental Health and Substance Abuse quipped it concern on this matter regarding principles and intervention strategies for emergency situations (WHO, 2003) in response to issues like these. The Department encourages the growth of mental health care within the framework of general health services. Women who have been abused must be treated for mental health issues by such services. Specific intervention strategies for treating women who have been the victims of sexual violence are briefly outlined, with guidance from WHO (2003)'s general framework and principles. Information on help access and about a woman’s participation in matters community should be made open (WHO, 2003). Women that survived trauma need psychological aid and especially on basic physical needs as well as immunity to harm. Furthermore, this concept stems from women being twice as vulnerable as men to suffer depression as well as anxiety disorder (Ommeren et al., 2003).

The promotion of culturally appropriate, functional coping mechanisms should continue to be a component of social interventions following an acute emergency (Ager, 2002). In addition, efforts ought to be made to begin making a wider and stronger variety of mental health interventions that are community-based, and that are sensitive to the mental health issues faced by women accessible. First, community mental health teams based in general hospitals and/or community mental health centers need to ensure that women with severe mental disorders, like psychosis, severe depression, are better placed to receiving effective acute care which doubles up as a follow up initiative.

Second, making sure that mental health care is available to everyone in the health care system. Teaching health care workers how to identify and treat common mental disorders (such as anxiety and mood disorders) as well as severe mental disorders may be part of this. Confidential and culturally appropriate conversations about taboo subjects like women's sexuality need to be taught to health care workers. It's important to note that health care workers may sometimes be more reluctant to discuss sex with patients. Finally, establishing links outside of the formal health care system through, for example, training female social service workers, teachers, community leaders, traditional birth attendants, and, if possible, traditional healers in the following fields: identifying mental health issues, providing basic counseling for problem-solving, leading women's self-help groups, and directing patients to formal mental health care.

Women's mental health is at risk due to gender-based violence. Gender-sensitive general health and general mental health services must address trauma-related mental health issues. Western models may be out of sync with the experiences, cultures, and requirements of most non-Western societies, in addition to the fundamental differences in the resources that are available to developed and developing nations. Understanding

how distress and suffering are conceived and expressed in various societies is necessary for the planning of effective interventions (Hollifield *et al*., 2021).

According to Igreja *et al*., (2004) traumatic experiences and perceptions of time, and emotional suffering caused by the disturbance of social relationships and rituals may differ significantly across cultures. Therefore, psychiatric categories used in the West may not resemble other parts of the world entirely. It's possible that measurement tools made just for developing nations won't work across cultures. The Harvard Trauma Questionnaire (HTQ), for instance, classifies lack of shelter as a sign of trauma. This was true for refugees from Indochina, according to Mollica *et al*., but not for the sampled population in Igreja *et al*. 's Mozambique study (Igreja *et al*. 2004), in which the kind of shelter was important.

As previously stated, the health of refugee populations is harmed by the insecure and overcrowded conditions found in refugee camps. Refugee communities are faced with a swollen risk of sexually transmitted infections (STIs) because of broken families, the poverty-driven commercial sex trade (Toney- disrupted traditions Butler TJ *et al*., 2022). Lack of employment for men leads to boredom, depression, and an increase in alcohol consumption and, as a result, increased domestic violence and rape in numerous camps. The spread of STIs is further fueled by this. The dual goals of reducing the spread of STIs and improving mental health are achieved by addressing psychosocial issues like drinking and depression caused by absence of employment, feelings of social isolation and hopelessness and perceptions of lost culture (Sweileh *et al*., 2018).

Refugee camps serve as a base for these needs-based interventions, which come with their own risks. At the Benaco camp for Rwandan refugees, for instance, the AIDS

Control and Prevention Program (AIDSCAP) of CARE International provided a wide range of interventions, including campaigns to change sexual behavior, provide treatment, and raise awareness of AIDS. AIDSCAP's interventions also focused on the connection between the spread of HIV/AIDS among refugees and psychosocial issues. Methods included putting women's income-generating projects into action to reduce their susceptibility to infection; linking political and religious leaders in the planning process to garner their influential support; arranging youth health clinic tours to simplify treatment options; and organizing volunteer groups to support community members who are ill or disabled (Sweileh *et al*., 2018).

Similarly, armed groups can benefit from HIV/AIDS treatment and psychosocial support in the aftermath of a conflict in order to prepare for demobilization. UNAIDS/WHO (2002) reports that the deployment of troops has been linked to a rise in the prevalence of HIV/AIDS in some countries, including Uganda, where the prevalence rate among soldiers is nearly three times greater than that of the general population (9.5%). When wars end, infected troops come home and spread the disease to their families. Targeting military people with AIDS therapies has been shown to reduce both HIV prevalence and risky behavior, as seen in Thailand. A 1997 study found that while the proportion of military recruits who had recently visited a brothel had decreased from 58% to 23%, the proportion who had used condoms during their most recent visits had increased from 60% to 90%.

Even though women and girls in crisis face a dire situation right now, a part of the solution is to pay more attention to the specific problems they face, and the health needs they have as a result. Gender-based violence in crisis must be addressed, but long-term resolutions call for coordinated action from all key stakeholders. First, agencies and

organizations which specialize in the provision of health services in crisis and after a crisis must collaborate on developing joint responses and learn from and share their experiences addressing the health needs of women and girls in these settings. Second, in times of crisis, valuations of the specific health requirements of girls and women must be implemented. The affected women and girls should be included in these assessments and the health sector's response. Finally, donors ought to direct funds toward addressing the requirements of women and girls in times of crisis, including issues related to gender-based violence.

2.4.1. Psychosocial Strategies Applied to Mitigate Mental Health Disorders

Due to a lack of specialized human resources and insufficient funding to establish specialized mental health services, most refugees live in countries with low or middle incomes, where mental health services frequently fail (Saxena *et al*., 2007; Kakuma et al., 2011). In 2013, the United Nations agency responsible for providing refugee protection and assistance issued guidance to aid refugee operations in strengthening services for mental health and psychosocial support (MHPSS). It is commendable that organizations like the United Nations are concerned about and working toward a better understanding of violence against refugee women. The guidelines highlight a variety of forms of violence, including poverty-related issues as well as rape and sexual assault. Even though this has been a good first step toward stopping these abusive acts, there is still a lot of work to be done to fix these issues. UNHCR has been able to improve working relationships with local police forces over the past few years. UNHCR contributed to the financing of a mobile Kenyan court, which meets on a regular basis to hear and decide cases involving refugees and locals. Even though UNHCR contributed to the court's funding, Kenyan law governs all their legal decisions.

The UN Foundation and Cooperative Action for American Relief Everywhere (CARE) started a new program to help with the huge problem of collecting firewood. According to UNHCR (2013), the two organizations collaborated to launch a micro lending program geared toward vulnerable women. The program of providing firewood significantly reduced the likelihood of rape. The bitterness of the men who were not permitted to participate in this program, which made it difficult for some women to continue, was the only issue that was not fully addressed. This section of the study is inconclusive since several men refused to answer directly when asked about anger. These women frequently had connections to the men who were unable to partake this program, which forced the woman to withdraw from it. Women have felt more and more empowered in the refugee camps, despite the negative aspects. Camps have reported anti-rape committees established by refugees to address this widespread issue. Not only does it give women more authority to discuss this taboo, but it also validates a shift in how refugees view rape. This demonstrates that women are not always blamed for this appalling act. Actually, a few married women have claimed that their husbands did not leave them simply because they had been raped.

Put together, these experiences alter women's perceptions of a woman’s nature and their responsibilities, despite the suffering. Sadly, women have banded together to fight rape as a collective instead of individually. It's also possible that girls will discover that there is more out there for them than what they have been forced to accept by simply experiencing sports for the first time in their lives through the design of simple clothing. Small steps have made a big difference for these women and children, despite the issues with NGOs and UN organizations. People who have been driven from their homes arrive in a location in search of a haven.

A gender equity project is run by the Lutheran World Federation/World Service (LWF/WS), a UNHCR partner in Kakuma Camp, to raise awareness of gender-related issues, particularly the rights of girls. The project makes deliberate efforts to improve women's status in social, cultural, and economic spheres that have historically been male dominated. Women have been able to hold positions of leadership in the camp, including those on the food and security committees, ever since the program began in 1998. Surveying demographic data has improved, with gender-based disaggregation of this data now possible. However, there is room for improvement in gender-specific assistance.

Communities with decision-making structures show male dominance. In camp management, many decisions that affect women are made without their input. Refugee women's exclusion from decision-making has been justified by culture and tradition. The UNHCR's policy is to include refugee women as much as possible in all decision-making processes, including food distribution. Men at the camp, on the other hand, find measures to reduce gender inequality to be disempowering. Men and women alike suffer from several negative effects when social structures that are already in place are torn apart during conflict. People often find themselves in situations of conflict where they are unable to fulfill the roles that are expected of them. Due to the loss of their means of production, they are also impacted by a lack of self-reliance and self-sufficiency.

2.5. Traditional Approaches and Beliefs

The perception of traumatic events can have a significant emotional impact. For instance, relatives of Albanian Kosovars who lost their lives in the 1999 war saw their loved ones as martyrs, which made the grieving, process easier (De Jong, 2002). In a

similar vein, families who have a stout belief in reincarnation or an afterlife may experience less trauma when coping with the loss of a loved one. Values and beliefs play a significant role in coping with loss and preparing for the future, according to two recent Afghan studies. According to Lopes Cardozo and his colleagues (2004), disabled and non-disabled Afghans used reading the Koran or praying as one of the top two coping strategies. Punamaki's (1996) research on the mental health of Palestinians found that women's and their children's mental health improved when they were ideologically and religiously committed, connected to others, and involved in local politics.

In developing nations, most people with mental health issues hardly seek treatment in any health facilities at all. Instead, traditional healers and rituals are frequently used by those who seek assistance. Traditional healers can be used for mental health care due to their accessibility and cultural acceptance. Mollica makes the point that the local healing system is still there, despite the damage caused by conflict or other traumatic events. However, traditional healers and rituals should be approached with caution because the same high social regard that makes them effective can also be easily abused. People who have been traumatized can frequently benefit from the customs and rituals of their communities in helping them return to normal life. Many of these rituals involve symbolic cleansing, such as washing away blood or traumatic memories, driving away evil spirits, or calling on ancestors for help. Western approaches to trauma treatment, which place a greater emphasis on psychotherapeutic recollection and experience recall, are in sharp contrast to these rituals.

Instead, the goal of traditional ceremonies is to break away from the past. In Uganda, for instance, a collective purification ritual performed by elders assists group rape

survivors in coping with various traumatic experience (De Jong, 2002). Nevertheless, in some communities, a raped woman can be killed for putting shame on her family (De Jong, 2002). Wessels and Monteiro (2000) and Honwana (1997) describe how communities in Angola and Mozambique use rituals and ceremonies to ease soldiers back into society after serving in conflict. There has to be research into current trauma recovery strategies, data gathered to establish whether they improve mental and psychosocial states, and work done to bolster effective practices.

Even though cleansing and rituals can be very helpful for dealing with milder forms of psychosocial stress and helping communities deal with people who have returned from war, they should be approached with caution. From a gender perspective, McKay and Mazurana emphasize the need for caution because some rituals promote patriarchy and oppressive gender roles while also violating the human rights of women and girls. According to Bouta, Frerks, and Bannon (2004), rituals can clearly be harmful in certain circumstances, such as when they involve female genital mutilation performed by members of secret societies. Customs that are harmful to mental and psychosocial well-being must be discouraged in the same way that helpful methods should be promoted.

2.6. Conceptual Framework

The conceptual framework depicted in Figure 2.1 guided this study. The refugees' mental health, specifically the possibility that they will develop mental illnesses like depression, anxiety, physical and psychological trauma, drug and substance abuse, a lot depends on certain cultural and socioeconomic factors that affect their mental health. However, psychosocial support interventions (IASC Guidelines), international humanitarian law, legal authority, and policies, as well as engagement and investment from the private sector, can alter this.

The harrowing flight conditions and the pre-flight experience of societal upheaval, repression, and institutional breakdown are both factors that contribute to the traumatizing effects of refugee settlements. The social causation theory and the trauma theory will therefore serve as the study's foundation. So, I used the ideas from the two theories in this study to explain how socioeconomic factors affect the mental health of vulnerable people in Kakuma refugee camp, how vulnerable populations in Kakuma refugee camp are affected by underlying psychosocial factors and how the vulnerable populations in Kakuma refugee camp are impacted by psychosocial support intervention strategies.

2.6.1. Trauma Theory

According to contemporary trauma theory, a traumatic experience is one in which the normal capacity for coping is overwhelmed (Ahearn *et al*., 2017). Traumatic stressors cause neurological and biological responses, which impair an individual's ability to integrate psychosocial processes and cause them to shut down. Self-healing through the use of humor, exercise, and spirituality is proven to work, according to trauma theory. Good nutrition and relaxation techniques can further enhance it rather than relying on long-term handouts. According to Ahearn (2017), trauma theory focuses on systemic, societal issues rather than individual pathology.

The trauma theory helps us understand the complex ways in which traumatic experiences can shape a person’s psychological and emotional wellbeing. How it explains refugees' experiences in the pre- and post-migration periods following war-related violence and conflict in their home countries will demonstrate the significance of this theory. Additionally, it will outline the actions that vulnerable groups at risk

must take to survive mental health issues. Although it may not adequately address the social dynamics of psychosocial issues, the social causation theory will complement it.

2.6.2. Social Causation Theory

Many people who live in areas of armed conflict do not necessarily see an instantaneous end to a life that was previously adversity-free after experiencing war and violence (Shany, 2018). Two opposing perspectives challenge the underlying causal structure of the inverse association between SES and mental disease in an effort to explain the relationship between psychosocial factors and the mental health of refugees in Kakuma refugee camp. Do people's mental health issues stem from their socioeconomic status, or do their socioeconomic situation stem from their mental health issues.

According to the social causation theory, socioeconomic determinants like poverty, prejudice, and social inequality play a role in the emergence of mental health issues (Gøtzsche-Astrup J., 2022). The socioeconomic determinants of mental health have been extensively studied (Allen *et al*., 2014), however this field has paid little attention to refugee populations. The mental health of refugees, who often face numerous forms of social hardship before, during, and after migration, has been studied using this idea.

Instead of being the result of only individual elements like inheritance or personal actions, mental health difficulties are influenced by broader social structures and processes, according to the social causation hypothesis (Seifert *et al*., 2021). Stress and unpleasant emotional feelings can lead to mental health difficulties, and social factors and experiences can contribute to this. Stress and unpleasant emotions, according to this theory, can contribute to mental health problems like anxiety and depression,

especially in people who are already at a disadvantage due to factors like poverty and social exclusion (KAVAKLI, 2020).

By zeroing in on persistent sources of anxiety, we can learn more about the social determinants of mental health beyond just exposure to violence (Thomas et al., 2022). Poverty, perceived prejudice, and familial violence are all examples of socioeconomic variables that can have a negative impact on an individual's mental health. Inadequate property access and possibilities to engage in occupational and recreational activities are other environmental issues.

The complex relationships between social factors and the psychological well-being of refugees can be better understood with the use of the social causation theory. The wider structural factors that contribute to poor mental health can be addressed in order to produce interventions that are more efficient and sustainable than individual-level techniques alone.

In contrast, the viewpoints of social selection and social drift theory, which hold that people with a history of mental illness are more likely to be marginalized in society and the economy, are presented here. People with mental health issues are disproportionately likely to live in low-income households (Roberts *et al*., 2016).

The social selection theory proposes that elements across the biological, social, psychological, and economic spectrum contribute to mental health issues. In addition to offering appropriate medical and psychological treatments, it emphasizes the significance of addressing the biological, psychological, social, and economic variables that contribute to mental health disorders (Owen, 2004).

Organizations like the World Health Organization stress the need for cross-sector collaboration to foster the shared values and goals that are fundamental to providing high-quality, person-centered care to those at risk for mental health disorders. Sustainable care for social and emotional wellness at the individual, family, and community levels requires an inter-sectoral approach and awareness of social determinants (Zhang & Feng, 2022).

This is consistent with the recommendations made by the Inter-Agency Standing Committee (IASC) in its Minimum Service Package for Mental Health and Psychosocial Support in Emergency Settings (IASC, 2022). These recommendations emphasize the importance of multi-sector coordination in which different methods of psychosocial support and mental health complement one another.

Through this viewpoint, helping refugees develop resilience, or the ability to retain psychological well-being in the face of adversity, becomes crucial. Intervention assessment research with people affected by conflict and natural disasters typically focuses on interventions that target specific disorders (Hillel, 2023) despite the significant emphasis on psychological interventions with broader objectives in humanitarian operations.

Therefore, it is crucial to continue funding new studies inspired by public mental health in order to further our understanding of cost-effective promotion, preventive, and treatment strategies for a wide range of mental health disorders (Campion et al., 2022).

2.7. Conceptual Framework Model

This study was underpinned by two theories to help draw a relationship between independent variable and dependent variable.

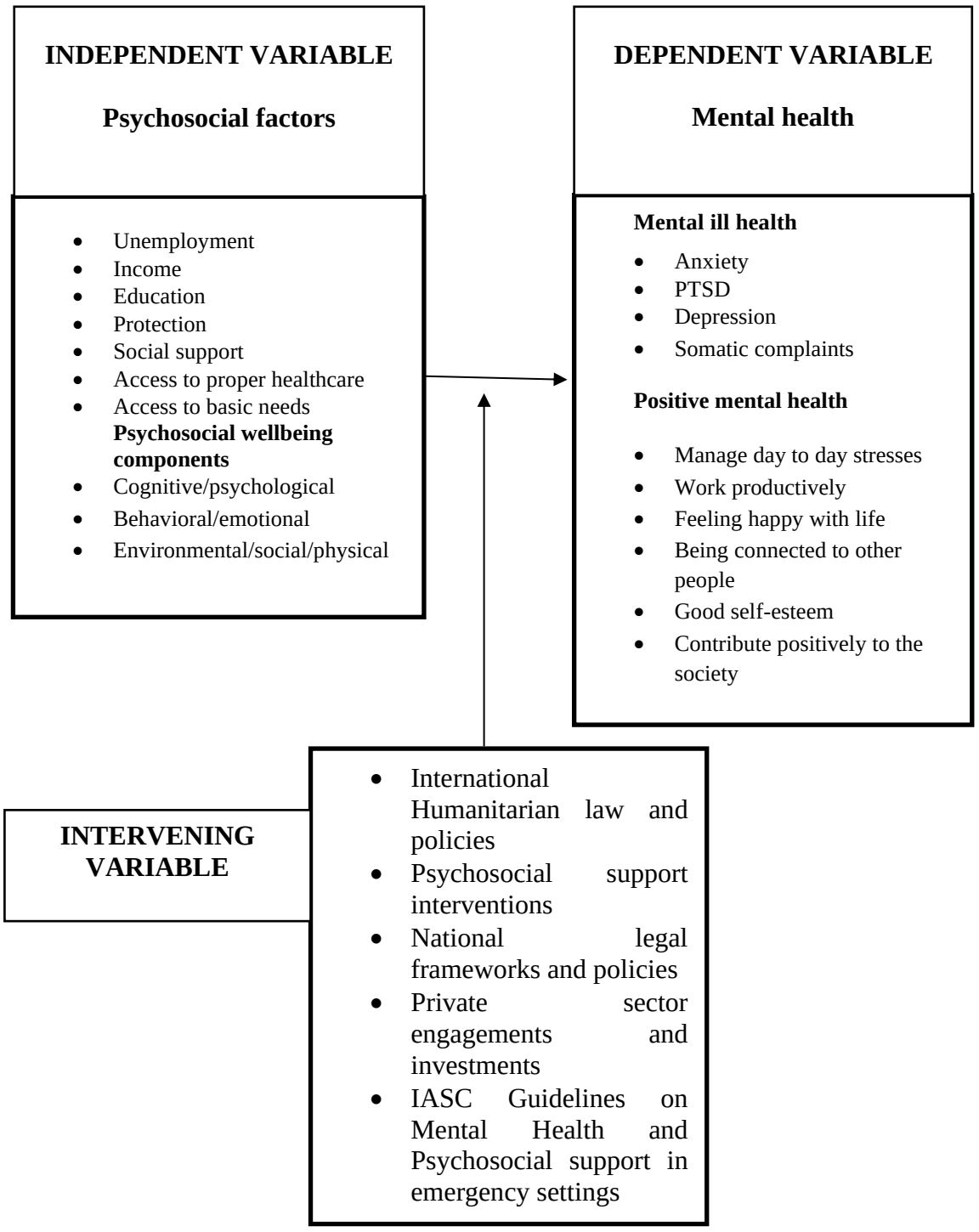

Figure 2. 1: Conceptual Model (Source: Researcher 2021)

The conceptual framework shows the relationship between variables. It depicts that psychosocial factors (socio-economic and physical) influence the mental well-being of the refugees. However, these are moderated by factors such as International Humanitarian Law, Psychosocial support initiatives, IASC guidelines on mental health (MHPSS) and national legal framework.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter articulates the research methodologies which were employed to collect, analyse and present data on the psychosocial factors influencing the mental health of vulnerable populations in Kakuma refugee camp in Turkana County, Kenya. In this chapter, a description of relevant sections including research design, study area, study population, sample size and sampling strategy, data collection methods, data analysis and presentation, ethical considerations, limitation to the study and summary have been presented.

3.1. Research Design

Providing effective, holistic, culturally sensitive care to vulnerable populations at risk of mental health problems requires an inter-sectoral approach, as emphasized by organizations such as the World Health Organization. Creswell and Creswell (2018) define a research design as the procedures for collecting, analyzing, interpreting, and reporting data in research studies. According to McCombes (2019), a research design is a plan to answer a set of questions. It's an organizational structure for data gathering, processing, and interpretation. In other words, the research design lays out the procedures that will be used to delve into the main issue. To better understand how psychosocial factors affect the mental health of vulnerable individuals in Kakuma refugee camp, this study used a descriptive research approach. According to Creswell (2018), a descriptive study's goal is to paint a picture of a phenomenon, show how things are related to each other and as they naturally occur, or some combination of these goals. Descriptive research designs are well suited for investigating the many factors that have

an impact on the mental health of at-risk populations. Researchers can learn more about the nature of the problem and why their research is necessary via a descriptive design (GradeFixer, 2019). The mental health of at-risk groups in the Kakuma refugee camp will be better understood with this information. Sustainable care for social and emotional wellness at the individual, family, and community levels requires an inter-sectoral approach and awareness of social determinants (Zhang & Feng, 2022).

This is consistent with the recommendations made by the Inter-Agency Standing Committee (IASC) in its Minimum Service Package for Mental Health and Psychosocial Support in Emergency Settings (IASC, 2022). These recommendations emphasize the importance of multi-sector coordination in which different methods of psychosocial support and mental health complement one another.

Through this viewpoint, helping refugees develop resilience, or the ability to retain psychological well-being in the face of adversity, becomes crucial. Intervention assessment research with people affected by conflict and natural disasters typically focuses on interventions that target specific disorders (Hillel, 2023) despite the significant emphasis on psychological interventions with broader objectives in humanitarian operations. Therefore, it is crucial to continue funding new studies inspired by public mental health in order to further our understanding of cost-effective promotion, preventive, and treatment strategies for a wide range of mental health disorders (Campion et al., 2022).

Table 3. 1: Specific Objectives and Designs Employed

Specific objectives	Variables	Research Design
i. To determine the influence of socio-economic factors on the mental health of vulnerable populations in Kakuma refugee camp.	Basic necessities Livelihood Education Health Security Housing and infrastructure Social life	Descriptive survey
ii. To explore the psychosocial wellbeing of vulnerable populations at risk in Kakuma refugee camp.	Multidimensional levels of psychosocial wellbeing of vulnerable populations at risk; physical, social, emotional and psychological indicators	Descriptive survey
iii. To evaluate the psychosocial support interventions applied in addressing the mental health of vulnerable populations at risk in Kakuma refugee camp.	Rehabilitation programs, Psychotropic medication, Psychosocial counselling, Case management, Mental healthcare training, Help lines, safe spaces, Clinical services , Psychosocial support in education, Strengthening of community and family support	Descriptive survey /evaluation

Source; Researcher, 2021

3.2. Study Area

The study was carried out in Kakuma Refugee Camp in Turkana County, Kenya. The camp is located in Turkana County which is in the Northwestern region of Kenya, which is generally hot and dry. The Kakuma refugee camp covers an area of 12 Km^2 and lies between latitude 3^0 42'N and 3^0 46' N and longitude 34^0 51'E and 34^0 49'E (GoK, 2018). The camp is situated 120 Kilometers from Lodwar District Headquarters and 95 kilometers from Lokichogio which is at the Kenya – Sudan border (Figure 3.1). Kakuma refugee camp is home to refugees from various nationalities which include Sudan, Democratic Republic of Congo, Ethiopia, Uganda, Rwanda, Burundi, South Sudan and Somalia among others, who have lived in the area for over ten years. Nationals from South Sudan and Somalia respectively, comprise the highest number of refugees in the camps (UN Habitat, 2021). The camp is administratively divided into four sub-camps, Kakuma 1 to 4. Kakuma, one has four zones with 42 blocks, Kakuma two has two zones two with 23 blocks, Kakuma three has four zones with 45 blocks, and Kakuma four has three zones with 26 blocks (Figure 3.1). There are 158,365 registered refugees and asylum seekers at Kakuma camp (UNHCR, 2020).

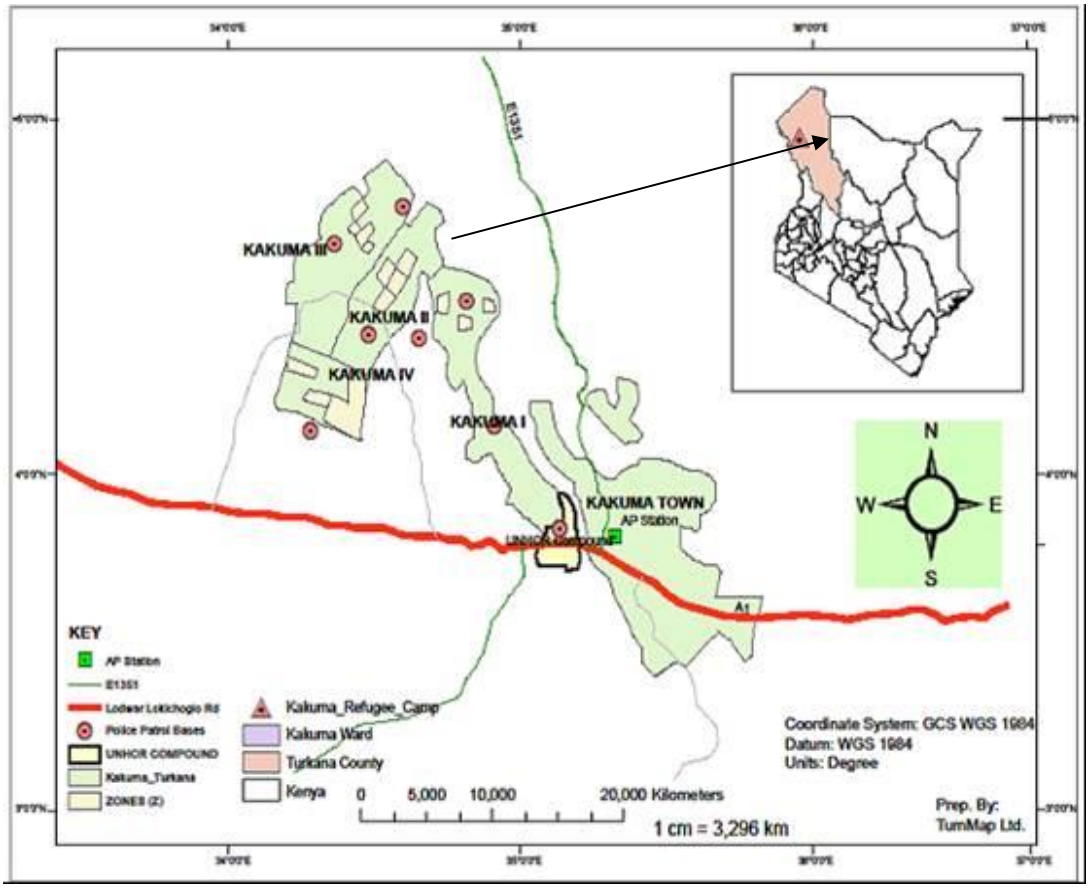

Figure 3. 1: Kakuma Refugee Sub-Camps

(Source: Researcher (2021)

3.2.1 Rationale for Choice of the Study Area

The choice of Kakuma refugee camp for this study was informed by the presence of refugees from various countries in the four sub-camps who settled in the camps following displacement from conflict and violence as well as natural disasters. The camp is overpopulated because of the refugee influx and the resources available are therefore overstretched and with the reducing global aid for refugees, this impedes socio-economic vibrancy in the camp. Furthermore, the hot and dry weather makes it more difficult for the refugees to earn a better livelihood. In addition to that, with the camp facing closure by the Government of Kenya, refugees are highly likely in a state of mental anguish that could deteriorate with time if not given close attention.

3.3. Study Population

Fraenkel and Warren (2019), observes that a population is the total number of people (or events) that share the criteria in question. The study population (38,530) included refugees and asylum seekers who are vulnerable and at greater risk of mental health illnesses sampled (394) as household heads. 12 (30% of 40) state and non-state actors were purposively sampled as key informants. State actors (RAS and DCS representatives) and non-state actors include Jesuit Refugee Service (JRS), International Rescue Committee (IRC), Lutheran World Federation (LWF), Danish Refugee Council (DRC), United Nations High Commissioner for Refugees (UNHCR), Windle International Kenya (WIK), IsraAID, United Nations International Children's Emergency Fund (UNICEF), World Food Programme (WFP), Norwegian Refugee Council (NRC), JWL, SIR in Kakuma refugee camp.

Table 3. 2: Kakuma Population Statistics by Country of Original Sex and Age Group

Nationality	Population	Household Heads
South Sudan	83109	17477
Somalia	35695	7881
Democratic Republic of Congo	12986	3650
Sudan	9524	3562
Burundi	9431	3270
Ethiopia	5604	1904
Uganda	1234	563
Rwanda	634	223
Total	158217	38530

Source: UNHCR SO Kakuma (2021).

3.4 Sample Size Determination and Sampling Procedure

According to Kothari and Garg (2014), a sample is a smaller group of participants chosen from the overall study population with the aim of deriving conclusions about the population studied. The study followed the table sampling procedures proposed by Isaac and Michael (1981) and Smith (1983) on Appendix VII, who concluded that a

sample size of 394 was adequate to reflect a population of 25000-499999. The number 394 stands for 38,530 families.

Table 3. 3: Sampling Head of Households

Sampling Units (countries of origin)	A Cluster Population (household heads)	B Total Population of Clusters(Total population of clusters)	C Number of sampled per cluster(No of HHDs)	D No of sampled clusters (sample size)	E % Per Cluster
South Sudan	17477	38530	179	394	45
Somali	7881		81		21
DRC	3650		37		9
Sudan	3562		36		9
Burundi	3270		33		8
Ethiopia	1904		19		5
Uganda	563		6		2
Rwanda	223		2		1
Total	**38530**		**394**		**100.0%**

Source: Researcher (2021).

Hansen and Hurwitz first introduced the Probability Proportional to size sampling in 1943. Probability-proportional-to-size is a sampling process where each element of the population has a chance to be selected to the sample especially if the survey is large in size and with multiple characteristics. Here, the probability of selecting a unit is proportional to its size. In the first stage, cumulative total of cluster population is calculated and number of clusters to be sampled is determined. Larger clusters have bigger probability of being sampled. In the second stage, the same number of individuals were sampled from each cluster irrespective of their cluster. Individuals in large clusters have smaller probability of being sampled. Overall, the second stage

compensates the first stage so that each individual in the population has the same probability of being sampled.

In this case, the primary sampling units and their population sizes are listed in column A. Each cluster has its own cluster population size (a). The cumulative sum of the population sizes is calculated in column B. The number of sampled clusters (d) was determined in column D. The number of individuals sampled from each cluster (c) was also determined in column C. The total population was divided by the number of clusters to be sampled to get the sampling interval (SI). A random number is chosen between 1 and the SI.

Probability Proportional to sample size (PPS) 1= (a x d) ÷ b

Prob 1= (a x d) ÷ b

a = cluster population

b= total population

d= number of clusters

Prob 1: Probability of each clusters being sampled = Cluster population ÷ total population

Prob 2: Probability of each individual to be selected from each of the sampled clusters = Number of individuals to be selected from each of the sampled clusters ÷ cluster population

Therefore, overall probability = Prob 1 × Prob 2

Overall weight = 1 ÷ Prob 1 × Prob 2

3.5. Data Collection

The necessary data was gathered using a combination of primary and secondary sources. Both quantitative and qualitative data were collected for the study. The quantitative tools for the study were household survey questionnaires, while the qualitative data tools included Focus Group Discussions (FGDs), interview schedules,

and an observation checklist. Because of the limitations inherent in employing a single data gathering strategy, this study made use of a combination of techniques (Denzin, 1989).

3.5.1. Primary Data Collection

3.5.1.1. Questionnaires

It is essentially a set of questions with a set structure used to collect data from individuals about a particular topic or topics. Because of how useful it is for collecting consistent, broad samples of information, it sees extensive use in building studies. It is important for study goals to be reflected in the questionnaire (Sileyew, 2019). This study's questionnaire comprised various sections in line with the three specific objectives (Appendix II). According to Mugenda and Mugenda (2013), closed-ended questions are advantageous because they are easy to administer, analyze, and take a short period. The questionnaire consisted of both open and closed questions. Household questionnaires were administered to randomly selected households in Kakuma refugee camp. The household head was responsible for providing the required information.

3.5.1.2. Key Informant Interviews

Interview schedules were used to collect the qualitative data for the study (Appendices III, IV, V, VI, VII, and VIII). The stakeholders for this study were purposively selected to participate in the study.. The interviews were administered to petroleum sector players, public health officers, NEMA, WRA, Makueni County government department of agriculture, livestock and fisheries, county department of energy, water and environment, and medical officers.

In a semi-structured interview, the researcher has the opportunity to ask open-ended questions, gain novel perspectives, and evaluate occurrences from a variety of angles thanks to the personal nature of the conversation. The interview schedules were conducted through interviews and, where possible, by telephone and online media to adhere to the COVID-19 regulations. The interview was selected because of its malleability and versatility. It allows the researcher to steer the direction of the study, ask different questions, and dig deeper into responses (Prewitt, 1975).

3.5.1.3. Key Informants

Key informants are knowledgeable people who can provide insight into a research phenomenon that the researchers do not have because they are well-versed in information about their community, its inhabitants, the sites visited, or the issue under study either because of their leadership role, professional background or personal experience. They are not typically studied participants (that is, they are not the research subjects; they offer information about those subjects) neither are they a representative of the study population, but they can assist a researcher in gaining a better understanding and more precise insights and eliminating potential bias (Payne, 2004).

The sampled state and non-state actors totaled to 40 respondents. The researcher adopted Mugenda and Mugenda, (2003) who argued that a sample of between 10%-30% of the total population is appropriate for the study. The 30% of 40 state and non-state actors is 12. The researcher sampled key informants proportionately.

Table 3. 4: Sampling of Key Informants

Nature of Humanitarian Actor	Number of Actor and non-Actor	Name Organization/ government Officials	Sample Size	Position
State actors	2	RAS Officers	1	Assistant Registration Officer
		DCS Officers	1	Assistant Department of Children
Non state actors	10	UNHCR	1	Field Security Officer
		UNICEF	1	Child Protection Officer
		WFP	1	Assistant Field officer
		KRCS	1	Public Health Officer
		JRS	1	Occupational therapist
		DRC	1	Assistant livelihood Officer
		JWL	1	Program Officer
		NRC	1	ICLA Project Officer
		IRC	1	Mental Health Nurse
		WIK	1	Administrator
Total			12	

Source: Researcher (2021).

The study interviewed 12 key informants, equally split between state and non-state actors, based on their proximity to each of the four sub-camps.

3.5.1.4. Observation

Observation is a method of data collection that entails seeing and taking notes on things as they occur in their natural environment, be it people, events, or physical qualities. There are two types of observations: overt and covert. In an overt observation, the subjects are aware that they are being watched. Data gathering is time-consuming and labor-intensive, and it may need to be repeated to assure reliability. There are various types of observation, including participant observation in which the researchers become fully immersed in the study location, get to know the subjects, and actively engage with the environment, as opposed to direct observation in which the researchers merely

observe the subjects without engaging with the environment (Kalof *et al*., 2008). Observers can use video, or audio recordings to capture data, field notes, which qualitative analytical methods can be examined (Guest *et al.*, 2013).

The researcher used an observation tool to capture observable attributes such as the influence of socio-economic factors on mental health of vulnerable populations at risk in the camp. This helped the researcher better understand how the socio-economic conditions in the camp affect asylum seekers and refugees emotionally and psychologically. In this study, the observation unit was asylum seekers, refugees, socio-economic conditions and dimensions of psychosocial well-being in the camp. The observation took place when the researcher collected data through questionnaires and interviews which helped the researcher determine the authenticity of the data collected from questionnaires and interview. The researcher also took photos to validate the study.

3.5.1.5. Focus Group Discussion guide

Focus group discussions (FGDs) are a type of qualitative data gathering in which a professional facilitator leads a group of 6-12 persons who all have qualities relevant to the topic of discussion (Silajdzic, 2018).

Table 3. 5: Focus Group Discussion Guide

FGDs	FEMALE	MALE	TOTAL
i) Orphaned children's caregivers	5	3	8
ii) Teenage mothers	8	0	8
iii) Community leaders	3	5	8
iv) People with chronic illnesses and/or Disabilities	3	5	8
Total	19	13	32

Source: Researcher (2021).

The study's 32 participants were drawn from four different sections of the camp; each focus group discussion (FGD) included eight refugees or asylum seekers. To prevent bias and preserve everyone's right to an open discussion, close friends and family members weren't included in any of the groups. As can be seen in Table 3.4, the study took into account vulnerable sub-populations such the marginalized. Compared to a one-on-one interview or questionnaire, the information gleaned from the group focus discussions was invaluable. According to Hennink (2013), this strategy works well for gathering information on similar groups of people. Since the study's participants were all similar, this instrument worked well. The members of the focus group explored the economic and social factors that exacerbate tensions in the refugee camp and, in turn, affect the mental health of the refugees and other at-risk groups.

Table 3. 6: Summary of Study Sampling Strategy

Study Population Units	Target Population	Sample Size	Sampling Methods	Methods of Data Collection
House Hold Heads Kakuma	38530	394	Proportionate &simple random	Questionnaire
State and Non-State Actors	40	12 (30%)	purposive	Interview & Observation
Community leaders	30	8 (30%)	Purposive	Interview& observation
Orphaned children	32	8 (25%)	Purposive	Interview& observation
Teenage mothers	30	8 (27%)	Purposive	Interview& observation
People with chronic illnesses/Disabilities	30	8 (27%)	Purposive	Interview& observation

Source: Researcher (2021)

3.5.2. Secondary Data

A secondary dataset is one that was acquired by someone other than the primary user (Hillier, 2021). Data from secondary sources, such as the internet, textbooks, peer-reviewed publications, and government archives, can be used to supplement, triangulate, or validate primary data, to detect knowledge gaps prior to the data gathering exercise, and to do predictive modeling. In order to apply this knowledge to the present study, the researcher looks to proven tendencies in earlier research. Arranging, integrating, and evaluating these data sets is a part of this study technique (Vartanian, 2011). To supplement primary data, the researcher gathered secondary data from reputable websites, journals, papers, library books, conference proceedings, the United Nations High Commissioner for Refugees (UNHCR), the Refugee Secretariat

(Refugee Secretariat), public records bulletins, a policy and training manual, and strategic plans.

3.6. Validity and Reliability of Research Instruments

Research quality can be assessed with the aid of two concepts: reliability and validity. They are used to characterize the precision with which a certain methodology, test, or procedure measures something. Reliability refers to a measure's consistency, while validity refers to its precision (Middleton, 2022).

3.6.1. Piloting of Research Instruments

Kalobeyei village in Turkana County served as a test site for the research instruments. After receiving comments on the pilot study's instruments, adjustments were made for the full data collection. Participants in the pilot study were not included in the final surveys. The questionnaires utilized included both open-ended and closed-ended questions to ensure comprehensive data collection. In-person and electronic administration of structured questionnaires by the researcher were conducted.

3.6.2. Validity of Research Instruments

According to Yue Li (2016), an instrument's validity is determined by how well it captures the data it is designed to capture. To ensure validity, researchers must ensure that their findings are consistent with their methods, the data, and their interpretations of those results (Kalof et al., 2008). The instruments were validated by distributing them to three experts in the field of emergency management research. According to Cohen *et al.,* (2007), there are various forms of research validity, and the main ones were specified as face validity, content validity, construct validity and criterion validity which were used in this study to evaluate the instruments. The outcome was as follows:

Table 3. 7: Validity procedure of the study

Types of validity	Expert 1	Expert 2	Expert 3	Average
Face	70	70	69	70
Content	72	70	70	71
Construct	68	71	70	70
Criterion	65	68	67	67

Source: Researcher (2021).

Validity focuses on the extent at which requirements of scientific research methods have been followed during the process of generating research findings for instance, how well the data collected in the study accurately represent the study's various variables. According to Yue Li (2016), subject matter expert review is often a good first step in development of research instruments to assess content validity in relation to the area or field of study. In this study, data instruments were reviewed by supervisors and other senior lecturers from the department of emergency management studies. The researcher engaged two experienced research assistants whom the researcher trained on the process of data collection.

3.6.3. Reliability of Research Instruments

The reliability of a measuring device is defined as its capacity to reliably and consistently measure the quantities of interest. If the Cronbach alpha coefficient for a questionnaire is 0.7 or higher, then it can be regarded reliable (Cronbach & Shavelson, 2004). Table 4.1 displays the findings of the SPSS reliability analysis. All of the variables were found to have Cronbach's alpha values over 0.7, indicating excellent internal consistency (Mugenda & Mugenda, 2012).

Table 3. 8: Cronbach Alpha results

Variable	Cronbach Alpha
Socio Economic factors	0.832
Psychosocial factors	0.811
Mental Health	0.883

Source: Field Data (2021)

To test reliability of the instruments, data was collected on the same set of participants twice at intervals of two weeks in Kalobeyei settlement. Data analyzed was subjected to SPSS program where Cronbach Alpha Coefficient of reliability was ascertained, and the results revealed a coefficient index of 0.842 suggesting that the study questionnaire was reliable. Therefore, the instruments were adopted for study.

Validity and reliability for qualitative data was determined through selecting a skilled moderator to overcome personal bias, employ the strategy of triangulation, respondent validation through testing initial results with the participants and use of comprehensive data.

3.7. Data Analysis and Presentation

Babbie (2004) defines quantitative data analysis as the numerical representation and manipulation of observations for the purpose of describing and explaining phenomena. Before analysis, field-collected data was encoded, edited, and cleaned to attain consistency, readability, and coherence. Using the Statistical Package for the Social Sciences, version 25.0, data were analyzed. In data analysis, both descriptive and inferential statistics were used. Frequencies, percentages, and standard deviation were used to characterize trends in data distribution using descriptive statistics. Utilizing inferential statistics (regression, correlation, and ANOVA), intervariable associations

were determined. All statistical measurements were performed within a confidence interval of 95%. The results were then displayed using bar graphs, frequency tables, and percentages.

Table 3. 9: A Summary of Objectives, Indicators, Research Designs, Data Instruments and Data Analysis methods

Specific Objectives	Indicators	Research Designs	Data Collection Instruments	Methods of Data Analysis
i) To determine the influence of socio-economic factors on the mental health of vulnerable populations at risk in Kakuma refugee camp.	Necessities Livelihood Education Health Security Housing and infrastructure Social life	Descriptive	Questionnaires Interviews Observation Focus group discussion	Descriptive statistics, Frequencies & percentages Content analysis
ii) To explore psychosocial wellbeing aspect of the mental health of vulnerable populations at risk in Kakuma refugee camp.	Multidimensional levels of psychosocial wellbeing of vulnerable populations at risk; physical, social, emotional, and psychological indicators	Descriptive	Questionnaires Interviews Observation Focus group discussion	Descriptive statistics, Frequencies & percentages Content analysis
iii) To evaluate the psychosocial support interventions used to address the mental health problems of vulnerable populations at risk in Kakuma refugee camp.	Rehabilitation programs, Psychotropic medication, Psychosocial counselling, Case management, Mental healthcare training, Help lines, safe spaces, Clinical services, Psychosocial support in education, Strengthening of community and family support	Evaluation	Questionnaires Interviews Observation Focus group discussion	Descriptive statistics, Frequencies & percentages Content analysis

Source: Researcher (2021).

3.8. Limitations of the Study

The following were the limitations of this study.

Data collection during the COVID-19 period was particularly challenging due to COVID-19 measures such as social distancing, that had to be adhered to and which limited the number of people the researcher could gather information from at a given time, making the process slower and longer. In situations where possible, the researcher facilitated data collection via online method for an extended period.

Restricted movements due to coronavirus, the researcher interviewed those willing from relevant places and moved door to door within the camp to get information on socio-economic factors influencing mental health and the psychosocial well-being of refugees. The researcher also used Google forms as an alternative method of data collection specifically for those who had smartphones. However, poor network connection in the camp made this process a bit difficult.

Soliciting funds: The researcher was able to assure the donors that the study will advance scholarship and help individuals in need of humanitarian aid.

Due to the harsh weather and the hectic schedules of the humanitarian relief workers, the researcher had to plan interviews with them in advance, conduct the interviews via phone, and email the questions to those who could not be reached by phone. That was an additional option for learning about camp tactics. To better manage the camp and collect data in the event of severe weather, the researcher went there when it was rather hot.

3.9. Ethical Considerations

The investigator took measures to lessen the prospect of further trauma. All participants were made aware of the study's goals. Participants were read a consent form that explained the confidential nature of the questions, their right to end the interview at any time, and their opportunity to ask any questions they had before deciding to take part in the study. The research assistants had experience conducting interviews with refugees, and they had received training in this area. As may have been anticipated, it was challenging for survivors to open up about their experiences. The participants, however, thought the material was useful for both their own and the public mental health. In addition, the interviewers had a kind and welcoming tone, which put the participants at ease since it was the first time they had the opportunity to have their experiences of trauma and psychological wellness confirmed. After the interviews were over, most of the participants expressed relief, and several said they felt like a weight had been lifted. The respondents were promised that their responses would be kept private and that the data obtained would be utilized exclusively for research (Rivera *et al.,* 2003).

The study was submitted to MMUST's Directorate of Postgraduate Studies (DPS) for green-lighting. To begin collecting data, the researcher first sought approval from the Masinde Muliro University of Science and Technology Ethics Committee before applying for a research permission from the National Council of Science, Technology, and Innovation (NACOSTI). Respondents were asked for their consent to participate in the study via an introduction letter, and any concerns they voiced were addressed before they were asked to participate. Without permission letters from the relevant institutions and assurances of anonymity for respondents, the researcher may struggle to collect useful data.

3.10. Summary

This chapter detailed the methodology used by the researcher to compile the information presented in the study. Both the physical and social elements of the study's setting are outlined. Population, sampling strategy, and sample size are all covered in this chapter. Validity and reliability testing procedures for the data collection instruments are outlined. Data analysis methods were also covered in this chapter.

CHAPTER FOUR

INFLUENCE OF SOCIO-ECONOMIC FACTORS ON THE MENTAL HEALTH OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP

4.1. Introduction

The primary goal of this study was to identify the impact of socioeconomic determinants on the mental health of at-risk individuals, and this chapter presents and examines both quantitative and qualitative findings and results from descriptive analysis and regression analysis. Data was collected through the use of questionnaires administered to household heads, interview schedules administered to key informants, and community focus group discussants, coded, analyzed according to the independent variables, discussed, and presented in tables.

However, the chapter first looks at the response rate as well as findings on the socio-demographic profiles of the respondents; age, gender, nationality, level of education, marital status, and number of years of residence in the camp for the refugees who were broadly categorized as heads of households.

4.1.1. Response Rate

A total of 394 questionnaires were distributed to residents of the Kakuma refugee camp for this study; 344 were returned, for a response rate of 87.3% (see table 4.1 for details). Creswell (2014), states that a response rate of 70% or more is excellent for extrapolating results from a sample to the complete community from which the sample was obtained. This level of participation was sufficient to draw meaningful results and formulate useful suggestions for the study.

Table 4. 1: Response Rate

Response	f	%
Successful	344	87.3%
Unsuccessful	50	12.7%
Total	394	100%

Source: Field data (2021)

According to Mugenda and Mugenda (2003), a response rate of 50 percent is adequate, 60 percent is acceptable, and 70 percent is rated as excellent. (Richardson, 2005) agrees, stating that a response rate of 60% or more is both desirable and possible. According to this argument, the 87.3% response rate in this scenario is excellent.

4.1.2. Gender of the Respondents

The study results indicated that most of the respondents, n=182 (52.9%) of the total respondents who participated in the study were male, n=161 (46.8%) of the total respondents were female while only n=1 (0.3%) of the total respondents were intersex (Table 4.2).

Table 4. 2: Gender of the Respondents

Gender	Frequency	Percent
Male	182	52.9
Female	161	46.8
Intersex	1	.3
Total	344	100.0

Source: Researcher, 2021

The findings in Table 4.2 reveals therefore, that majority of the respondents were male followed by female.

4.1.3. Age of Respondents

Table 4. 3: Age Distribution of Respondents

		Frequency	Percent
Valid	Under 18	100	29.1
	18-21	130	37.8
	22-30	77	22.4
	31- 40	28	8.1
	41-50	9	2.6
	Total	344	100.0

Source: Field Data (2021)

The findings reveal that, youth between 18-30 years forms most of the population accounting for n=207 (60%) of the entire population in the camp. This implies that majority of the refugee respondents in the camp are mature adults who were able to comprehend issues surrounding psychosocial factors and mental health. Children below 18 years come second after the youth at n=100 (29.1%) of the entire population in the camp. The elderly above 40 years of age are the least at n=9 (2.6%) as indicated in table 4.3.

4.1.4. Highest Level of Education Attained

Table 4. 4: Level of Education of Respondent

	Frequency	Percent
No formal education	61	17.7
Primary	93	27.0
Secondary	153	44.5
Tertiary	37	10.8
Total	**344**	**100.0**

Source: Researcher, 2021

The study results showed that majority of the population in the camp n=153 (44.5%) had attained secondary education, n=93(27%) having only completed primary education while about n=61(18%) don't have any formal education. Out of the total population only n=37 (10.8%) have attained tertiary education (Table 4.4). According to scholarly argument, a primary certificate and above that level of education, warrants an individual acceptable literacy level (Smith, 2013). This implies that majority of the refugee respondents were able to make meaning of the discussion surrounding psychosocial factors and mental health with better understanding and clear elaborations with minimal ambiguity hence quality feedback. As Tan (2014) puts it, that in the event of the presence of educated respondents in a study, the question under study can be better interpreted, understood, and clearly elaborated with minimal ambiguity. The study also found that fewer girls were making the jump from elementary to middle school.

The lack of access to high-quality education is a worldwide problem for refugees (Arabac *et al.,* 2014). After the civil conflict, over half of the Syrian population was expelled to other nations (Trends 2015). According to Nebehay (2015), the number of Syrian refugees is second only to that of Palestinians. Only 40% of Syrian refugees are able to participate in their host nations' formal education systems. Culbertson and Constant (2015) and Nebehay (2015) both note that this will have long-term consequences for both the displaced Syrians and the nations that take them in. Multiple factors, including prejudice, difficulty assimilating into society, and a lack of a common language, pose challenges for refugee children's schooling (Bourgonje, 2010; Nonchev, and Tagarov, 2012; Dryden-Peterson, 2016). As a result, their academic performance may suffer compared to their peers who are not immigrants (Hachfeld *et al*., 2015). As discussed by Guruge and Butt (2015), schools and educational systems are ideally

suited for the early detection and treatment of mental illnesses among refugee children and adolescents, before sending them to more specialized mental healthcare clinics.

4.1.5. Duration of Residence in the Camp in years

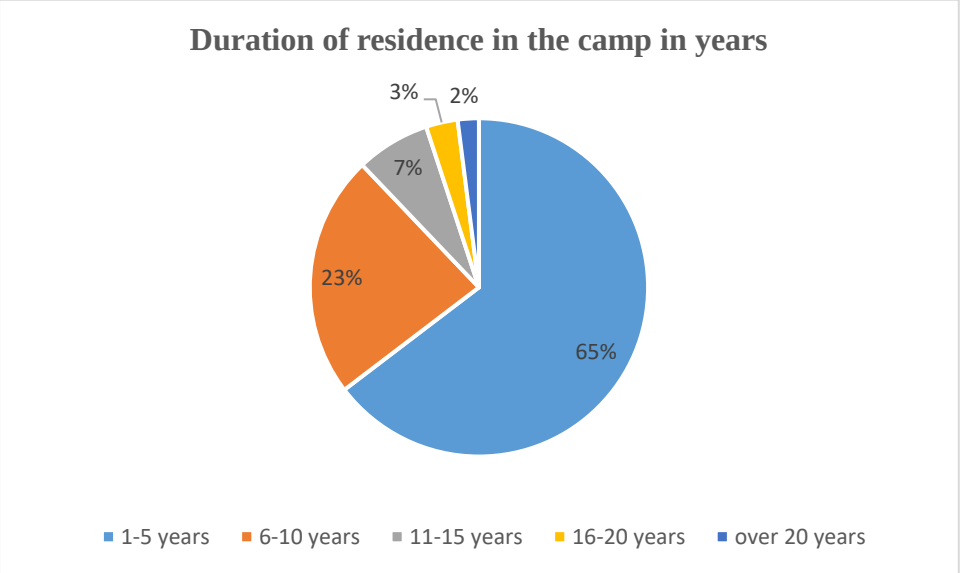

Figure 4. 1: Duration of Residence in the Camp

Source: Field Data (2021)

The results in **Figure 4.2** showed that most of the population (90%) have stayed at the camp for at most 10 years, while the least population represented by 2.4 % have lived in the camp for more than two decades. The findings reveal that respondents who had stayed in the camp for 1-5yrs were 219(63.7%), 6-10yrs 80(23.3%), 11-15 26(7.6%), 16-20 11(3.2%) while above 20yrs were 8(2.4%). This means that majority of the refugee respondents are well versed with the living conditions (socio-economic conditions) in the camp and are therefore, well placed to understand psychosocial issues in the camps of residence (Fig 4.2).

4.1.6. Camp of Residence of Respondent

The study also sought to investigate the category of camp where respondents were drawn. The results are as shown in Table 4.5

Table 4. 5: Camp of Residence of Respondent

		Frequency	Percent
Valid	Kakuma 1	108	31.4%
	Kakuma 2	81	23.5%
	Kakuma 3	82	23.8%
	Kakuma 4	73	21.2%
	Total	344	100.0

Source: Field Data (2021)

The study results show that majority of the respondents among the refugee population live in Kakuma 1 accounting for n=108 (31.4%) of the total population. This can be assumed that Kakuma 1 has the largest population of refugees thus more respondents.

4.1.7. Country of Origin of Respondents

The study results indicated that majority of the refugees in Kakuma refugee camp are from South Sudan by origin as indicated by n=142 (41.3%) followed marginally by Congolese at n=46 (13.4 %) and Burundians at n=43 (12.5%) See table 4.6. This can be attributed that South Sudan closely borders Kenya thus majority of the respondents found her as the best for safety.

Table 4. 6: Refugee Category Based on Country of Origin

		Frequency	Percentage
Valid	Somali	16	4.7
	Congolese	46	13.4
	Ethiopian	27	7.8
	Burundian	43	12.5
	Sudanese	29	8.4
	Ugandan	25	7.3
	Rwandese	12	3.5
	South Sudanese	142	41.3
	Others	4	1.2
	Total	344	100.0

Source: Field Data (2021)

4.1.8. Marital Status

Table 4. 7: Marital Status of Respondent

		Frequency	Percent
Valid	Never married	146	42.4
	Married	162	47.1
	Widowed	17	4.9
	Separated/Divorced	19	5.5
	Total	**344**	**100.0**

Source: Field Data (2021)

The study results indicated that n=162 (47.1%) of the adult population in the camp are married with almost equal population being the teenage stage who are not married. Cases of divorce is low as indicated by a low percentage of 5.5 % that is n=19 and only n=17 (4.9%) of the total population of respondents is widowed (Table 4.7). The findings, therefore, reveal that most of the respondents had families thus having a greater impact on their psychosocial condition.

4.1.9. Disability of Respondents

Table 4. 8: Disability of Respondents

	Frequency	Percent
Yes	43	12.5
No	301	87.5
Total	**344**	**100.0**

Source: Field Data (2021)

The results of the study show that majority of the respondents that is 301(87.5%) of the total population among the refugees in Kakuma refugee camp have no disability while the remaining 43(12.5%) of the refugee population has some form of disability.

4.1.10. Size of Household and Household Heads

The study also sought to find out the number of people per household. Household respondents were asked to provide the number of household members as a factor that would influence food ration, for example. The majority of the household heads were females.

4.2. Socio-economic Characteristics

4.2.1. Source of Livelihood and Monthly Income

The study also sought to understand the source of livelihood and monthly income of the respondents. The results are shown in Table 4.9.

Table 4.9 Sources of livelihood of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Informal employment	55	16.0	16.0	16.0
	Formal employment	46	13.4	13.4	29.4
	Business	37	10.8	10.8	40.1
	Humanitarian aid	206	59.9	59.9	100.0
	Total	344	100.0	100.0	

Source: Field Data (2021)

Majority of the households [n=206] (approximately 60%) in Kakuma refugee camp depend on humanitarian aid for their daily survival, while about n=101 (30%) depend on formal and informal employment as their sources of livelihood. Only n=37 (10%) of the entire population have managed to operate their own businesses as their source of survival (Table 4.9). Source of livelihood were almost similar to the monthly income where about 60% of the households had no monthly income while 23.5 had monthly

income ranging between Ksh 3000-10000. Less than 2.5% of the persons at the camp earn more than Ksh 20000 per month (Figure 4.3).

4.2.2. Monthly income of the respondents

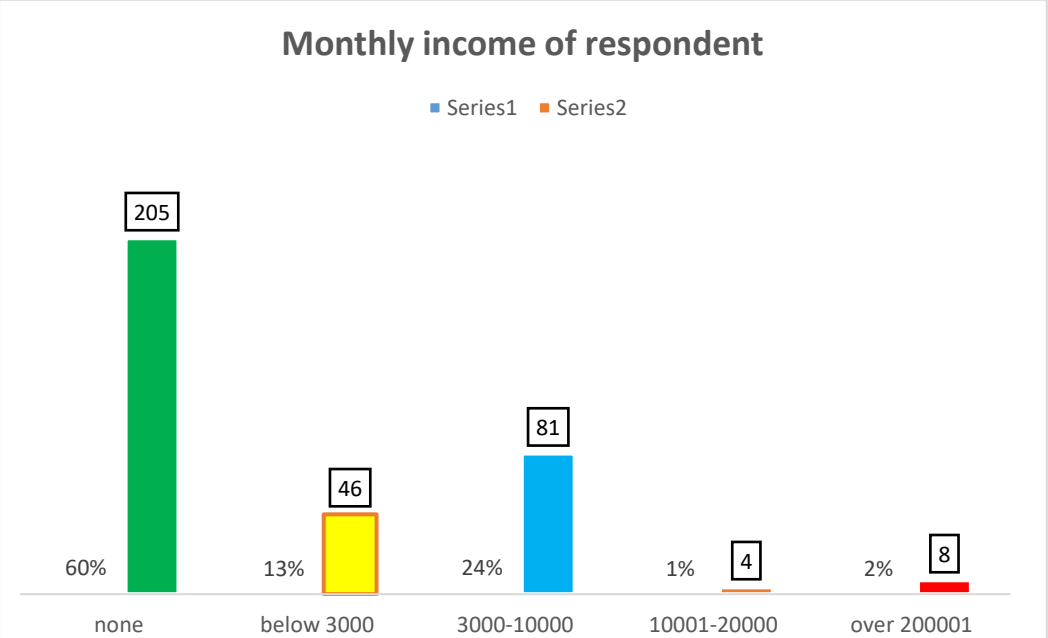

Figure 4. 3: Monthly income of the respondent

Source: Field Data (2021)

4.3. Well-being Check of the Respondents

This part of the study was carried out to establish the general well-being of the respondents while allowing the respondents to relax mentally and emotionally as well as give the researcher a clear picture of what to expect as the discussion around psychosocial factors and mental health unfolded.

Table 4. 10: Respondent Emotional Wellbeing

	1(SD)	2(D)	3(U)	4(A)	5(SA)	Mean	STD
I feel happy	46 (13.4%)	122 (35.5%)	41 (11.9%)	79 (23%)	56 (16.3%)	3.07	1.33
I feel pleased, full of life and satisfied	35 (10.2%)	116 (33.7%)	50 (14.5%)	84 (24.4%)	59 (17.7%)	2.95	1.30

Source: Field Data (2021)

Based on the results indicated in Table 4.10, a good number of the respondents disagree (n=122) to feeling happy, pleased, full of life and satisfied (n=116). However a good number agreed (n=79 and n=84) to being happy, pleased and satisfied. This means that in as much as the refugees' emotional well-being is unstable, there is a significant level of resilience and positivity which when tapped into can help the vulnerable populations at risk of mental health illnesses recover progressively.

These findings agree with Montgomery's (2019) study whereby the refugees can be accorded emotional support through offering them solace and expressing compassion and warmth.

4. 4. Psychological wellbeing

The study sought to examine the psychological wellbeing of the respondents. The results are as shown in Table 4.11.

Table 4. 11: Psychological wellbeing of the respondents

	1(SD)	2(D)	3(U)	4(A)	5(SA)	Mean	STD
I maintain a positive attitude towards myself and my past life	38 (11%)	158 (46.1%)	51 (14.8%)	57 (16.6%)	40 (11.6%)	3.3983	2.50506
I have warm, satisfying and trustful relationships and I am empathetic	50 (14.5%)	148 (43.0%)	50 (14.5%)	52 (15.1%)	44 (12.8%)	3.3140	1.25716
I can manage a complex environment to suit my needs	40 (11.6%)	150 (43.6%)	39 (11.3%)	71 (20.6%)	44 (12.8%)	3.2064	1.25745
I have potential for personal growth	59 (17.2%)	159 (46.2%)	41 (11.9%)	40 (11.6%)	45 (13.1%)	3.4273	1.26880
I can direct myself with my own socially accepted internal standards	55 (16.0%)	175 (50.9%)	41 (11.9%)	33 (9.6%)	40 (11.6%)	3.5000	1.20978

Source: Field Data (2021)

According to the findings in table 4.11, majority of the respondents disagreed with the statements in the table that is n=158(46.1%), n=148 (43%), n=150 (43.6%), n=159(46.2%) and n=175 (50.9%). Based on these findings, the psychological wellbeing of the refugee populations is generally unstable. This can be attributed to war-related trauma, displacement challenges and ongoing stressors in the host countries.

Little was known about the psychological impact of displacement and the numerous stressors it entails, because post-migration stressors generally were not part of the

models being tested (Miller & Rasmussen, 2016). This calls for more attention on the psychological implications of post-migration on refugees and specifically those at greater risk of deteriorating mental health.

4. 5. Social Wellbeing

The researcher sought to investigate the social well-being of the respondents within the refugee camp. The findings are as presented in Table 4.12.

Table 4. 12: Social Well-being

	1(SD)	2(D)	3(U)	4(A)	5(SA)	Mean	STD
I feel that my life contributes to society and is valued by others	59 (17.2%)	146 (42.4%)	52 (15.1%)	50 (14.5%)	37 (10.8%)	3.41	1.23
I feel a sense of belonging to the community	61 (17.7%)	166 (48.3%)	45 (13.1%)	47 (13.7%)	25 (7.3%)	3.56	1.15
I hold a positive attitude towards peoples differences	74 (21.5%)	131 (38.1%)	41 (11.9%)	68 (19.8%)	30 (8.7%)	3.44	1.26
I am able to make meaning of what is happening in the society	54 (15.7%)	179 (52.0%)	53 (15.4%)	30 (8.7%)	28 8.1%)	3.58	1.11
I believe that people have potential and can grow positively	71 (20.9%)	166 (48.3%)	41 (11.9%)	38 (11.0%)	27 (7.8%)	3.63	1.16

Source: Field Data (2021)

Generally, the results indicate that the social well-being of most of the respondents is poor as is evidenced by the outstanding figures on disagree (D) column. There is growing recognition that although psychological wellbeing is relatively stable over time, it can be influenced by contextual factors such as the provision of social support from others in one's social networks (Siedlecki *et al*., 2014).

4.6. Chronic illness

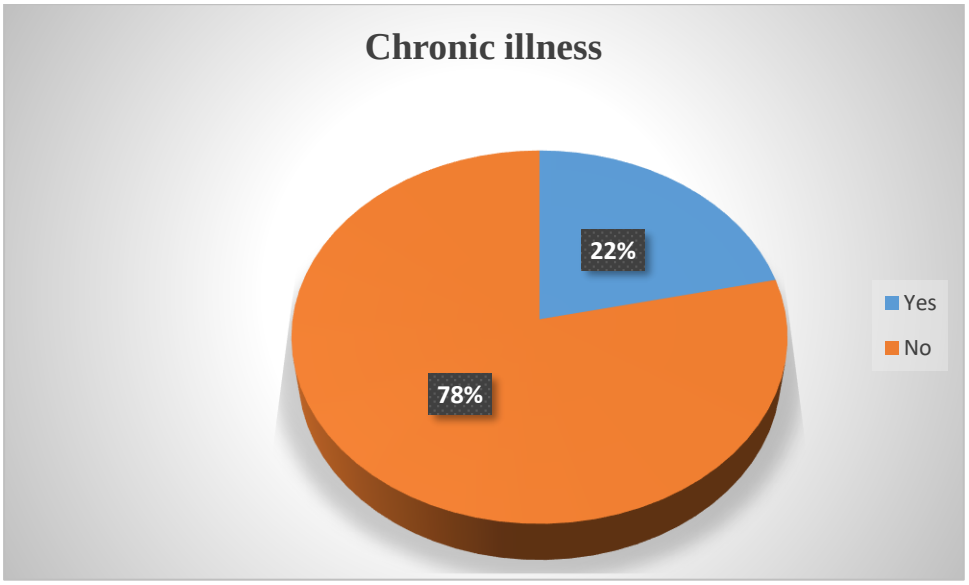

Figure 4. 4: Chronic Illness

According to the results on Fig 4.4, n=268 (78%) of the respondents did not have any chronic illness as compared to n=76 (22%) of the respondents who had chronic illnesses. Therefore, this shows that most of the respondents were not at risk of mental health illnesses. Chronic illnesses can be a risk factor for deteriorating mental heallth among refugees given the fact that access to proper healthcare services in the camp is a challenge.

The results of this study go against the conclusions reached by Peyrot and Rubin (1997), who suggested a connection between diabetes and depressed symptoms. According to a meta-analysis (Anderson *et al*., 2001), people with diabetes are twice as likely to experience depressive symptoms. Depression has been linked to an increased risk of diabetes in certain research. Notably, this correlation was only observed in those with an education level below that of a high school graduate (Carnethon *et al*., 2003), which is common among economically disadvantaged groups like immigrants. These findings

suggest that the likelihood of getting diabetes in patients with severe depressive symptoms is increased by characteristics associated with lower socioeconomic level.

4.7. Social Support, Influence, Connections, and Integration

Table 4. 13: Social Support and Integration

	5(SA)	4(A)	3(U)	2(D)	1(SD)	Mean	STD
Food supply is adequate	15 (4.4%)	35 (10.2%)	37 (10.8%)	94 (27.3%)	163 (47.4%)	1.99	1.18
The emergency shelters are appropriate	34 (9.9%)	27 (7.8%)	27 (7.8%)	160 (46.5%)	96 (27.9%)	2.25	1.23
There are adequate educational opportunities	161 (46.8%)	84 (24.4%)	50 (14.5%)	31 (9.0%)	18 (5.2%)	2.02	1.20
Essential healthcare services are available	115 (33.4%)	127 (36.9%)	55 (16.0%)	29 (8.4%)	18 (5.2%)	2.15	1.13
Safety from violence is assured in the camp	19 (5.5%)	43 (12.5%)	99 (28.8%)	70 (20.3%)	113 (32.8%)	2.75	1.22
Public infrastructure system is reliable	7 (2.0%)	30 (8.7%)	71 (20.6%)	71 (20.6%)	165 (48.0%)	1.96	1.10
Services are provided in a timely manner	17 (4.9%)	31 (9.0%)	53 (15.4%)	42 (12.2%)	201 (58.4%)	1.90	1.24

Source: Field Data (2021)

According to the findings in Table 4.13, majority of the respondents strongly disagreed with the statements provided in the table that is for example, 201(58.4%) out of 344 respondents strongly disagreed with timely provision of services in the camp, n=165(48.0%) indicated that public infrastructure is unreliable, n=113(32.8%) safety from violence is not guaranteed, n=163(47.4%) inadequate food supply. However, there are adequate educational opportunities (n=161) and availability of essential healthcare services (n=127). Lack of access to adequate housing, shelter, education, and employment has far-reaching consequences. Poor socioeconomic situations after migration have been linked to an increased risk of acquiring depression symptoms in

numerous studies (Bogic et al. 2015; Bell and Zech 2009; Hollander 2013).While 86% of Turkana households had to deal with not having enough food or money to acquire it, 83% of refugee households are already in this precarious position (WFP, 2016). Kovacev and Shute suggests that social support can be a possible mediator between cultural adaption and psychosocial adjustment in general.

4.8. Events of Social Disparity

Table 4. 14: Social Disparity

	(D)	3(U)	4(A)
Uncertainty during asylum seeking process	139(40.4%)	105(30.5%)	100(29.1%)
Discrimination and social inclusion	77(22.4%)	133(38.7%)	134(39.0%)
Restrictions on capacity to work	70(20.3%)	55(16.0%)	219(63.7%)
Resettlement and acculturation challenges	61(17.7%)	69(20.1%)	214(62.2%)
Violence, threats or conflicts in the community	75(21.8%)	103(29.9%)	166(48.3%)
Grief from the loss of loved ones	62(18.0%)	55(16.0%)	227(66.0%)
Adjusting to and dealing with life in the camp	62(18.0%)	89(25.9%)	193(56.1%)
Disruption of family support, social network, and community structures	59(17.2%)	85(24.7%)	200(58.1%)

Source: Field Data (2021)

From the results, majority of the respondents in the camps have experienced social disparity as vulnerable populations at risk as evidenced by numbers indicated by those who agreed to have experienced disruption of family support, social network and community structures (n=200), grief from loss of loved ones (n=227), restrictions on capacity to work (n=219) and resettlement and acculturation challenges (n=214). Stresses related to poor mental health commonly revolve around social alienation, discrimination, and racism (Wong *et al., 2017)*.

Most problems that arise during resettlement have to do with the refugees and their children learning to function socially in a new community, adjusting to a new language and culture, and adjusting to a new environment (Murray et *al*., 2010). The development of self-confidence and the mitigation or prevention of mental health issues are both aided by participation in social activities (Priebe *et al*., 2016). Social isolation and the inability to find work are two factors that contribute to refugees' low standard of living (Bogic *et al*., 2015; Steel *et al*. 2009)

4.9. Economic Hardship

Table 4. 15: Economic Hardship

	5(SA)	4(A)	3(U)	2(D)	1(SD)	Mean	STD
Obtaining employment	139	83	62	22	38	3.76	1.34
	(40.4%)	(24.1%)	(18.0%)	(6.4%)	(11.0%)		
Financial constraint in funding daily expenditure	126	114	70	21	13	3.93	1.07
	(36.6%)	(33.1%)	(20.3%)	(6.1%)	(3.8%)		
Limited opportunities to generate income	121	112	69	25	16	3.87	1.12
	(35.2%)	(32.8%)	(20.1%)	(7.3%)	(4.7%)		
Access to land for farming	159	80	53	38	14	3.97	1.19
	(46.2%)	(23.3%)	(15.4%)	(11%)	(4.1%)		
Housing affordability	99	72	49	43	81	3.19	1.55
	(28.8%)	(20.9%)	(14.2%)	(12.5%)	(23.5%)		

Source: Field Data (2021)

With respect to data on economic hardship, majority of the respondents in the camps are experiencing economic hardship as shown by outstanding numbers of respondents who strongly agreed to challenges involving obtaining employment (n=139), financial constraints in funding daily expenditure (n=126), limited opportunities to generate income (n=121),access to land (n=159) and housing affordability (n=99).

These findings agree with a study conducted by (Kim, 2014). The study indicates that refugees are often unemployed and underemployed as compared to host populations. Research suggests that refugees with restricted access to economic opportunities, as a result of limited work rights and employment prospects, are at greater risk of deteriorating mental health outcomes compared to those with greater access to these economic opportunities. Unemployment is a strong risk factor for depression and anxiety in refugee populations alongside pre-migration trauma (Kim I, 2016).

Majority of Syrian refugees are forced to labor in the informal economy due to a lack of official employment possibilities (Wells *et al*., 2016). Asylum policies, work opportunities, shelter placements, and educational opportunities are all areas where program development and improvement can help ease the process of integration (Priebe *et al*., 2016).

4.14 Implications of Socio-economic Disadvantage on Mental Health of Refugees

Table 4. 16: Impacts of Socio-economic Disadvantage on Mental Health of Refugees

	1(SD)	2(D)	3(U)	4(A)	5(SA)	Mean	STD
I feel stressed to an extent I can't carry out my daily activities	71 (20.6%)	81 (23.5%)	35 (10.2%)	90 (26.2%)	67 (19.5%)	3.00	1.45
I get overwhelmed by anxiety	36 (10.5%)	89 (25.9%)	60 (17.4%)	103 (29.9%)	56 (16.3%)	2.84	1.27
I resort to drug and substance abuse	35 (10.2%)	65 (18.9%)	32 (9.3%)	73 (21.2%)	139 (40.4%)	2.37	1.43
I have trouble sleeping	57 (16.6%)	108 (31.4%)	40 (11.6%)	92 (26.7%)	47 (13.7%)	3.10	1.34
I feel irritable and angry	43 (12.5%)	126 (36.6%)	55 (16.0%)	74 (21.5%)	46 (13.4%)	3.13	1.27
I feel depressed	46 (13.4%)	108 (31.4%)	53 (15.4%)	82 (23.8%)	55 (16.0%)	3.02	1.32
I feel detached and withdrawn from the people	41 (11.7%)	97 (28.2%)	51 (14.8%)	77 (22.4%)	78 (22.7%)	2.86	1.43
I feel hopeless and uncertain about the future	82 (23.8%)	102 (29.7%)	29 (8.4%)	69 (20.1%)	62 (18.0%)	3.21	1.46

Source: Field Data (2021)

In determining the implication of socio-economic disadvantage on mental health of vulnerable populations at risk, majority of the respondents cumulatively agreed to feeling stressed to an extent of not being able to carry out daily activities (n=157), getting overwhelmed by anxiety (n=159) and resorting to drug and substance abuse

(n=212). Accordingly, the effects of socio-economic disadvantages on the mental health of refugees and especially those who are at greater risk of developing mental illnesses is evidently adverse from the results. This is backed up by a study by (Li et al., 2016). The study asserts that refugees face post-migration socio-economic challenges that implicate their mental health. These socio-economic challenges include financial and housing security, financial difficulties, multiple barriers to employment including visa restrictions, qualifications from their home countries not being recognized in the resettlement country, poor language and vocational skills, psychological or physical barriers and discrimination. On the other hand, a significant number disagreed to having trouble sleeping (n=165), feeling irritable and angry (n=169) and feeling depressed (n=154). This shows that there is a chance to salvage the refugees' mental health through capacity building and empowerment.

Regression analysis was used to tell the amount of variance accounted for by one variable in predicting another variable. Regression analysis was conducted to find the proportion in the dependent variable (Mental health) which can be predicted by the independent variable (Socio Economic factors). Table 4.17 shows the analysis results.

Table 4. 17: Model Summary for Socio-economic Factors and Mental Health

				Std. Error of	Change Statistics					Durbin -
Model	R	R Square	Adjusted R Square	the Estimate	R Square Change	F Change	df 1	df 2	Sig. F Change	Watson
1	**.447[a]**	**.200**	**.198**	**.71303**	**.200**	**85.593**	**1**	**342**	**.000**	**1.536**

a. Predictors: (Constant), Socio Economic
b. Dependent Variable: Mental Health

Source: Field Data (2021)

Findings in Table 4.17 reveal a statistically significant association between socio economic factors and mental health among vulnerable populations at risk in Kakuma refugee camp. Specifically, the study data revealed an r square value of 0.20 signifying that 20.0% of the variance witnessed in mental health of the refugees was a result of socio-economic factors. The remaining 80% of the factors that influence mental health of refuges can be explained by other factors that were not part of this study which are explained by the error term.

Table 4. 18: ANOVA model for socio economic factors and mental health

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.517	1	43.517	85.593	.000b
	Residual	173.877	342	.508		
	Total	217.393	343			

a. Dependent Variable: Mental Health

Source: Field Data (2021)

Analysis of variance (ANOVA) output in Table 4.18 for socio economic factors as a predictor of mental health among refugees had an F value of 85.593 that was statistically significant within 99% confidence interval with a p-value=0.000. This implies that the regression model in Table 4.18 was well fitted to predict mental health issues among refugees in Kakuma Refugee camp.

Table 4. 19: Coefficients for Socio economic factors and mental health

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.166	.130		8.993	.000
	Socio Economic	.389	.042	.447	9.252	.000

a. Dependent Variable: Mental Health

The results in Table 4.19 revealed a beta coefficient of 0.447, which was significant at 99% confidence interval with a P value of 0.000. The dependent variable. It also means

that Socio economic factors is a useful predictor of mental health. The regression equation to estimate the mental health as a result of changes in the socio-economic well-being therefore becomes; Y= 1.166 + 0.389 SE + Ɛ where Y= Mental Health, SE= socio economic factors and Ɛ is the error term. The implication for this finding is that, holding all other factors constant, a unit change in socio economic factors results in 0.389-unit changes in mental health of refugees in Kakuma refugee camp. Findings from this study were compared with findings from previous studies on the effect of socio-economic factors on mental health of refugees.

CHAPTER FIVE

EXPLORATION OF THE PSYCHOSOCIAL WELLBEING ASPECT OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP

The second objective of the study sought to explore the psychosocial wellbeing aspect vulnerable populations at risk in Kakuma refugee camp.

5.1. Knowledge and Attitudes about Mental Health

Data on knowledge and attitudes about mental health was collected and analyzed and findings presented in Table 5.1.

Table 5. 1: Knowledge and Attitudes about Mental Health

	5(SA)	4(A)	3(U)	2(D)	1(SD)	Mean	STD
I understand what the word mental health means	70 (20.3%)	168 (48.8%)	27 (7.8%)	36 (10.5%)	43 (12.5%)	3.54	1.27
Mental health can be positive and it means psychological wellbeing	54 (15.7%)	172 (50.0%)	35 (10%)	42 (12.2%)	41 (11.9%)	3.45	1.24
Mental health is negative it really only means psychological illness	35 (10.2%)	65 (18.9%)	32 (9.3%)	73 (21.2%)	139 (40.4%)	3.18	1.22
To deal with trauma, it helps to think or talk about what happened	37 (10.8%)	139 (40.4%)	57 (16.6%)	70 (20.3%)	41 (11.9%)	3.46	1.11
Mental health problems are shameful	28 (7.9%)	87 (25.3%)	37 (10.8%)	81 (23.5%)	111 (32.3%)	2.56	1.53
It's good to talk to family about my mental health	56 (16.3%)	204 (59.3%)	31 (9.0%)	32 (9.3%)	21 (6.1%)	3.71	1.04
I use healthy strategies to cope with negative thoughts	39 (11.3%)	180 (52.3%)	51 (14.8%)	37 (10.8%)	37 (10.8%)	3.43	1.16
people with mental health problems are all crazy	29 (8.4%)	66 (19.2%)	44 (12.8%)	86 (25.0%)	119 (34.6%)	2.42	1.35
I feel I can depend on my community to help me cope with challenges	39 (11.3%)	173 (50.3%)	49 (14.2%)	49 (14.2%)	34 (9.9%)	3.39	1.16
A lot of people in the community are struggling with mental health issues	77 (22.4%)	151 (43.9%)	47 (13.7%)	37 (10.8%)	32 (9.3%)	3.59	1.21

Source: Field Data (2021)

Based on the study findings, it is evident that most respondents know about mental health issues and how to address them. This is positive feedback since it made it easier to navigate the study on mental health of vulnerable populations at risk. According to (Jung & Kim, 2021), the higher the refugees' knowledge of mental health, the more positive their attitudes became toward mental illnesses because they better understand them and hold negative views on how they regulate their lives. It is also worth noting that several respondents did not have much knowledge about mental health issues, they did not have a proper understanding of coping mechanisms and they generally had a negative attitude towards mental health aspects.

5.2. History of Torture as a Measure of Physical Wellbeing

The researcher also sought to know whether respondents had experienced a history of torture and findings presented in Table 5.2.

Table 5. 2: History of Torture

	1(NO)	**2(U)**	**3(YES)**
Sexual and Gender based Violence	155(45.1%)	20(5.8%)	169(49.1%)
Serious physical injury from combat situation	158(45.9%)	26(7.6%)	160(46.5%)
Imprisonment	100(29.1%)	28(8.1%)	216(62.8%)
Destruction of personal property	164(47.7%)	39(11.3%)	141(41.0%)
Forced evacuation under dangerous conditions	147(42.7%)	35(10.2%)	162(47.1%)
Murder, or death due to violence of spouse, child, family member or friend	148(43.0%)	29(8.4%)	167(48.6%)
forced to physically harm family member or friend	102(29.7%)	36(10.5%)	206(59.9%)
Forced labour	80(23.3%)	38(11.1%)	226(65.7%)
Extortion or robbery	150(43.6%)	42(12.2%)	152(44.2%)
Brainwashing	104(30.2%)	44(12.8%)	196(57.0%)

Source: Field Data (2021)

5.2.1. Sexual and Gender-based Violence

Respondents were asked to indicate whether they had experienced sexual and gender-based violence at some point and n=169(49.1%) of the respondents agreed, n=155(45.1%) disagreed while n=20(5.8%) were undecided. This clearly shows that most of the respondents had experienced sexual and gender-based violence. Everyone is vulnerable to violence during war, flight and in the resettlement camps but without adequate social protection and secure access to services, women and girls are particularly at risk of experiencing sexual and gender-based violence (SGBV). Although domestic violence, sexual exploitation, and child marriage also occur during conflicts, it is generally accepted that sexual violence is a weapon of war (Ghida Anani, 2013).

Women migrants and refugees are vulnerable to SGBV during flight, as well as in their country of destination. A good number of women may also be fleeing different forms of GBV in their countries of origin. It is unfortunate; however, that there are few provisions in place on migration routes to protect women (Freedman, 2016).

In a Focus group discussion with women and young girls in Kakuma refugee camp, there were concerns about rape and sexual violence in the refugee camp. One respondent describes the situation as follows:

When we go to school very early in the morning sometimes when it's still dark, some men hide in the bushes and wait for us then they rape us. Some of these men are our family members so we can't report those (Respondent 2, FGD 3).

Another respondent described his experience as follows:

For my case, my wife was raped as I watched (Respondent 3, FGD 2).

5.2.2. Serious Physical Injury from Combat Situation

As to whether respondents had experienced serious physical injury from combat situation, n=158(46.5%) disagreed, n=160(45.9%) agreed while n=26(7.6%) were undecided. The study findings agree with a study by (Shook *et al*., 2018) that the most frequently reported potentially traumatic events (PTEs) for both men and women included being in a combat situation. According to a Focus group discussion held, a participant who had experienced injuries from combat as was evidently seen from the healed scars on his face, hands, and legs, described how he sustained serious injuries from an attack by his rivals who used weapons such as machetes to attack him.

Military conflicts have been linked to an increase in the incidences of mental health problems like PTSD, depression, and anxiety, as well as a wide range of other psychological and behavioral disorders. Before, during, and after relocation, refugees with mental health issues fall into three broad categories (Fazel *et al*., 2012; Buchmüller *et al*., 2020). During the pre-takeoff stage, public services including schools and hospitals are disrupted by violent groups. Children and their caretakers are subjected to torture, witness brutality, and lose loved ones as a result of armed conflict and war. Similarly, refugees may seek safety in large camps during their flight, despite the risks of starvation, sickness, inadequate medical care, contaminated water, and loss of privacy that these conditions pose (Moss *et al*., 2006). Deprivation and serious mental impairments are the result of such situations.

5.2.3. Imprisonment

Regarding confinement n=216(62.8%) of respondents concurred that they had been incarcerated, n=100(29.1%) disagreed, and n=28(8.1%) were unsure. Steel *et al*. (2018) found that refugees' mental health suffered as a result of their incarceration for extended

periods of time. These results are consistent with those found in prior research on the consequences of incarceration (see Steel and Silove (2000); Silove & Steel (2001); Sultan & O'Sullivan (Keller, Rosenfeld, and Trinh-Shevrin; Sultan & O'Sullivan, 2001; Keller *et al*., 2003).

5.2.4. Destruction of Personal Property

Pertaining to destruction of personal property n=141(41%) of the respondents agreed, n=164(47.7%) disagreed while n=39(11.3%) were undecided. The results of the study show that the property of a large number of refugees was destroyed. A study by Walter Kaelin (2006) agrees with the results of this study that one risk for displaced people and refugees is losing property they left behind and not being able to get it back. Many civil wars use property destruction as a tactic of war or even as a kind of ethnic cleansing, and opposition to returning home often takes the form of refusing to remove people who have taken over their homes or apartments, or refusing compensation for property that has been destroyed. This correlates with interview respondent, who opined.

“They broke our houses during the war. We had nowhere to go” (Respondent 5, FGD 4).

One particular risk internally displaced persons and refugees face is the loss of property left behind and the inability to recover it. In fact, destruction of property has become an instrument of warfare or even ethnic cleansing in many civil wars, and resistance to return often takes the form of refusal to evict persons who have taken over their houses or apartments, or to refuse compensation for destroyed property (Walter Kaelin

5.2.5. Forced Evacuation under Dangerous Conditions

Respondents were asked if they had experienced forced evacuation under dangerous conditions and 47.1% agreed, 42.7% disagreed while 10.2% were undecided. Based on these findings, it is evident that most of the respondents had experienced being evicted from their homes under dangerous conditions. As one participant put it during a focused group discussion.

"We were forced out of our home, and they killed my wife. We had nowhere to go and it wasn't safe to go outside" (Respondent 4, FGD 1).

According to a review of the literature conducted by Roberts & Browne (2011), the mental health of populations impacted by conflict in low- and middle-income nations is different from that of inhabitants in high-income countries. A review of 56 studies on the subject found that refugees' mental health was negatively impacted by their sociopolitical circumstances, but that humanitarian involvement improved their situation (Porter & Haslam, 2005). These factors may also account for the prevalence of substance misuse among conflict refugees in particular localities (Ezard, 2012).

5.2.6. Witnessed Murder or Death

As seen from the results of this study, most of the respondents n=167 (48.6%) agreed to witnessing murder or death due to violence of spouse, child, family member or friend.

The researcher also asked to know from respondents whether they had experienced situations where they were majority of the respondents n=206(59.9%) admitted to being forced to physically harm family member or friend, experienced forced labour n=226(65.7%), extortion or robbery n=152(44.2%) and being brainwashed n=196(57%).

"They make us work here for long durations even up to six months without pay. They tell us we're volunteering" (Respondent 2, FGD 4).

Based on the study findings, it has emerged that most respondents have a history of torture. This study conforms to findings from other empirical studies on torture among people in refugee camps. For instance, according to a recent study in Denmark among asylum-seeking immigrants indicates that 45% have been subjected to torture (Personn and Gard, 2013).

5. 3. Emotional and Psychological Traumas

Table 5. 3: Emotional and Psychological Traumas

	1(SD)	2(D)	3(U)	4(A)	5(SA)	Mean	STD
Sadness	22	42	67	147	66	2.00	1.45
	(6.4%)	(12.2%)	(19.5%)	(42.7%)	(19.2%)		
Irritable	15	40	83	153	53	2.84	1.27
	(4.4%)	(11.6%)	(24.1%)	(44.5%)	(15.4%)		
Feelings of numbness or emotional emptiness	22	37	60	111	114	2.37	1.43
	(6.4%)	(10.8%)	(17.4%)	(32.3%)	(33.1%)		
self-harming thoughts	23	49	38	97	137	3.10	1.34
	(6.7%)	(14.2%)	(11.0%)	(28.2%)	(39.8%)		
Trouble sleeping	23	72	60	117	72	3.13	1.27
	(6.7%)	(20.9%)	(17.4%)	(34.0%)	(20.9%)		
Feeling exhausted most of the time	27	41	89	116	71	2.53	1.17
	(7.8%)	(11.9%)	(25.9%)	(33.7%)	(20.6%)		
Feeling a need for revenge	23	32	62	107	120	2.22	1.28
	(6.7%)	(9.3%)	(18.0%)	(31.1%)	(34.9%)		
Sudden emotional or physical reactions	82	102	29	69	62	3.21	1.46
	(23.8%)	(29.7%)	(8.4%)	(20.1%)	(18.0%)		
Feeling detached or withdrawn from people	82	102	29	69	62	3.21	1.46
	(23.8%)	(29.7%)	(8.4%)	(20.1%)	(18.0%)		

Source: Field Data (2021)

The findings in Table 5.3 shows that majority (refer to figures in A and SA column) of the respondents have experienced emotional and psychological trauma as is evidenced by the symptoms of emotional and psychological trauma in table 5.3. This result is consistent with the conclusions of other studies that war refugees are exposed to multiple traumatic events, making PTSD the primary focus of many research and

intervention programs aimed at this group of people (Jordans, Semrau, Thornicroft, & van Ommeren, 2012).

Those who have experienced conflict, and have been forcibly displaced, are likely to experience emotional and psychological distress, although many will recover over time (Inter-Agency Standing Committee (IASC), 2007). A study of ten studies of PTSD treatment for refugees and asylum seekers found inconclusive results (Crumlish & O'Rourke, 2010), despite the fact that such treatment is well-established in the general population. In addition, specialized PTSD services are needed among refugees, although these are not always accessible (Bader *et al*., 2009). Research conducted on refugee communities in Jordan and Nepal by Miller and Rasmussen (2010) reveals that the impact of traumatic past events on distress is nuanced. The study indicated that perceived everyday pressures moderated the impact of exposure to conflict on mental health.

5.4. Anxiety Symptoms

Table 5. 4: Anxiety Symptoms

	1(SD)	2(D)	3(U)	4(A)	5(SA)	Mean	STD
Feeling tense	20	19	37	123	145	1.97	1.13
	(5.8%)	(5.5%)	(10.8%)	(35.8%)	(42.2%)		
Heart pounding or racing	18	34	55	153	84	2.27	1.10
	(5.2%)	(9.9%)	(16.0%)	(44.5%)	(24.4%)		
Suddenly scared for no reason	24	38	57	102	123	2.24	1.24
	(7.0%)	(11.0%)	(16.6%)	(29.7%)	(35.8%)		
Spell of terror or panic	14	38	59	129	104	2.21	1.11
	(4.1%)	(11.0%)	(17.2%)	(37.5%)	(30.2%)		
Nervousness or shakiness inside	12	43	69	131	89	2.30	1.09
	(3.5%)	(12.5%)	(20.1%)	(38.1%)	(25.9%)		
Feeling fearful	26	45	70	123	80	2.46	1.20
	(7.6%)	(13.1%)	(20.3%)	(35.8%)	(23.3%)		
Headaches	28	73	56	142	45	2.70	1.18
	(8.1%)	(21.2%)	(16.3%)	(41.3%)	(13.1%)		
Feeling restless or can’t sit still	31	47	61	125	80	2.49	1.24
	(9.0%)	(13.7%)	(17.7%)	(36.3%)	(23.3%)		
Faintness, dizziness or weakness	31	44	42	94	133	2.26	1.33
	(9.0%)	(12.8%)	(12.2%)	(27.3%)	(38.7%)		
Trembling	28	49	38	84	145	2.22	1.34
	(8.1%)	(14.2%)	(11.0%)	(24.4%)	(42.2%)		

Source: Field Data (2021)

According to Table 5.4, cumulative frequencies for agree (A) and strongly agree (SA) columns indicate that most of the respondents have experienced anxiety as a direct result of the effects of the wars and conflicts. These results are in line with a study by Henkelmann whereby the prevalence rates of anxiety, depression and PTSD among

adult refugees are high relative also to populations living in conflict or war settings. This suggests that it is not only the exposure to conflict and war itself that makes a refugee vulnerable to, for instance, PTSD, but that the flight and additional post-migration factors may aggravate the trauma-related symptoms (Henkelmann *et al*., 2020).

5.5. Depression Symptoms

Table 5. 5: How best do you describe your low moments? (Depression symptoms)

	4(Extremely)	3(Quite a bit)	2(A little)	1(Not at all)	Mean	STD
Thought of ending your life	189 (55.0%)	65 (18.9%)	43 (12.5%)	47 (13.7%)	1.87	1.12
Feeling of worthlessness	80 (23.3%)	114 (33.1%)	103 (29.9%)	47 (13.7%)	2.35	1.00
Worry too much about things	60 (17.4%)	101 (29.4%)	84 (24.4%)	99 (28.8%)	2.65	1.09
Feeling everything is an effort	44 (12.8%)	113 (32.8%)	71 (20.6%)	116 (33.7%)	2.76	1.07
Blaming yourself for things	87 (25.3%)	124 (36.0%)	61 (17.7%)	72 (21.0%)	2.35	1.10
Difficulty falling asleep	75 (21.8%)	129 (37.8%)	87 (25.3%)	52 (15.1%)	2.37	1.10
Feeling lonely	88 (25.9%)	126 (36.6%)	75 (21.8%)	54 (15.7%)	2.38	2.00
Feeling low in energy	75 (21.8%)	146 (42.4%)	65 (18.9%)	58 (16.9%)	2.32	1.02
Crying easily	149 (43.3%)	99 (28.8%)	58 (16.9%)	38 (11.0%)	1.97	1.05
Loss of sexual interest or pleasure	140 (40.7%)	93 (27.1%)	47 (13.7%)	64 (18.6%)	2.12	1.15

Source: Field Data (2021)

Table 5.5 shows that a greater number of respondents as shown in columns {3} and {4} cumulatively experienced depressive symptoms. These study findings are in agreement with a study by (Vonnahme *et al.*, 2015) who alludes that for instance,

Karenni refugees living along the Burmese-Thai border had a higher prevalence of depression (41%) and anxiety (42%) compared to rates in the US general population (7-10%, respectively). Major depression affects daily quality of life and is the psychiatric diagnosis most frequently associated with suicide. The lifetime suicide risk among patients with untreated depressive disorder is nearly 20% (Gotlib, 2010). According to (Marcus *et al.,* 2012), depression affects more people than any other mental disorder and is the leading cause of disability worldwide in terms of total years lost due to disability.

According to Slewa-Younan *et al.*, (2015), who conducted a systematic study on the incidence of post-traumatic stress disorder (PTSD) and depression in Iraqi refugees who had relocated to Western nations, showed high rates of PTSD (8-37%) and depression (28.3-75%).Studies of Syrian refugees in refugee camps in the Middle East and neighboring countries have found high rates of post-traumatic stress disorder (ranging from 27-83%) and depression (ranging from 37-44%; see, for example, Kazour *et al*., 2017; Naja *et al*., 2016; Chiang *et al.*, 2017; Acarturk *et al*., 2018; Alpak *et al.*, 2015). Increases in anxiety (40%) and PTSD (32%), as well as depression (47%), have been reported among Syrian refugees in the United States (Javanbakht *et al*., 2019).

5.6. Relationship between Psychosocial Wellbeing and Mental Health

An individual variable's predictive variance was determined using regression analysis. Psychosocial wellbeing was used as independent variable in a regression analysis to determine what percentage of the dependent variable (mental health) they might predict. Table 5.6 depicts the results of the analysis.

Table 5. 6: Table 5.6: Model Summary for Psychosocial Wellbeing and Mental Health

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	**.575[a]**	**.330**	**.328**	**.65249**	**.330**	**168.616**	**1**	**342**	**.000**	**1.395**

a. Predictors: (Constant), Psychosocial

b. Dependent Variable: Mental Health

Source: Field Data (2021)

Study findings in Table 5.6 reveal an R square value of 0.330 signifying that 33.0% of the changes witnessed in mental health status of refugees in Kakuma refugee camp was a function of psychosocial wellbeing. This implies that the remaining 67% unexplained variance in mental health status of refugees was a function of other factors that affect mental health but were not part of the study. Such factors are explained by the error term.

79.5 million people are displaced globally, 45.7 million are displaced within their own countries, and 26 million are refugees (UNHCR 2019). Wars, humanitarian crises, political conflicts and persecution, religious extremism, ethnic orientation, and tribal violence are all contributing factors to the predicament of the growing number of refugees (Oda *et al.,* 2017). Economic, environmental, psychological, emotional, and social difficulties (Porter and Haslam 2005; Silove et al. 1998; Fazel et al. 2005; Haaken and O'Neill 2014) are added to the list of challenges that these immigrants encounter. The physical and emotional health of refugees is significantly affected by factors such as forced relocation, local violence, and exposure to conflict and terrorism (Fazel et al., 2005).

Table 5. 7: ANOVA for Psychosocial Wellbeing and Mental Health

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	71.788	1	71.788	168.616	.000b
	Residual	145.606	342	.426		
	Total	217.393	343			

a. Dependent Variable: Mental Health

Source: Field Data (2021)

Table 5. 8: Model Coefficients for Psychosocial Wellbeing and Mental Health

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	**-.311**	**.205**		**-1.516**	**.130**
	Psychosocial	**.920**	**.071**	**.575**	**12.985**	**.000**

a. Dependent Variable: Mental Health

Source: Field Data (2021)

The results in Table 5.8 revealed a beta coefficient of 0.575 with a P value of 0.000, which was significant at 99% confidence interval. This implies that psychosocial wellbeing was a useful predictor of mental health among refugees in Kakuma Refugee camp. The regression equation to estimate the mental health because of changes in the psychosocial wellbeing was stated as: Y= -0.311+ 0.920 PSW +Ɛ where Y = Mental Health, PSW = Psychosocial Wellbeing and Ɛ = error term.

The extent to which a refugee community is impacted by mental health illnesses is difficult to quantify because it varies widely according to the unique circumstances of each person. However, research on permanently relocating refugees has placed the occurrence of PTSD at 10–40% and the prevalence of serious depression at 5–15% (Fazel et al. 2005; Turner et al. 2003). The younger the immigrant, the more severe the impact of mental health conditions was observed in several assessments of children's

experiences. Compared to adults, children and adolescents are more likely to experience PTSD (50-90%) and significant depression (6-40%) (Barenbaum *et al*., 2004; Lustig et al., 2004). According to Slewa-Younan et al. (2015), who conducted a systematic study on the incidence of post-traumatic stress disorder (PTSD) and depression in Iraqi refugees who had relocated to Western nations, high rates of PTSD (8-37%) and depression (28.3-75%). A high prevalence of posttraumatic stress disorder (ranging from 27-83%; Kazour et al. 2017; Naja et al. 2016; Ibrahim and Hassan 2017; Chung et al. 2017; Acarturk et al. 2018; Alpak et al. 2015) and depression (ranging from 37-44%; Acarturk et al. 2018) was reported in studies of Syrian refugees in refugee camps in the Middle East and neighboring countries. Increases in anxiety (40%) and PTSD (32%), as well as depression (47%), have been reported among Syrian refugees in the United States (Javanbakht et al., 2019).

CHAPTER SIX

EVALUATION OF THE PSYCHOSOCIAL SUPPORT INTERVENTIONS APPLIED IN ADDRESSING THE MENTAL HEALTH OF VULNERABLE POPULATIONS AT RISK IN KAKUMA REFUGEE CAMP.

The third objective of the study sought to evaluate the psychosocial support interventions applied in addressing the mental health of vulnerable populations at risk in Kakuma refugee camp. To this end data on Psychosocial Support interventions and mental health of vulnerable populations at Kakuma refugee camp was analyzed and findings presented in table 6.1.

Table 6. 1: Psychosocial Support Interventions Applied in addressing Mental Health

Item	Not effective (0)	Abit effective (1)	Not sure (2)	Effective (3)	Very effective(4)	Mean	STD
Rehabilitation programs	96 (27.9%)	60 (17.4%)	81 (23.5%)	39 (11.3%)	68 (19.8%)	3.23	1.47
Psychotropic medications	67 (19.5%)	95 (27.6%)	104 (30.2%)	47 (13.7%)	31 (9.0%)	3.35	1.20
Psychosocial counseling and occupational therapy	78 (24.7%)	55 (16.0%)	119 (34.6%)	62 (18.0%)	30 (8.7%)	3.40	2.95
Case management	67 (19.5%)	59 (17.2%)	129 (37.5%)	60 (17.4%)	29 (8.4%)	3.22	1.19
Community awareness about coping with distress	82 (23.8%)	89 (25.9%)	90 (26.2%)	48 (14.0%)	35 (10.2%)	3.39	1.27
Mental health care training	122 (35.5%)	63 (18.3%)	87 (25.3%)	46 (13.4%)	26 (7.6%)	3.61	1.29
Providing psychological support through help lines	122 (35.5%)	73 (21.2%)	83 (24.1%)	40 (11.6%)	26 (7.6%)	3.65	1.28
Access to clinical services provided in	71 (20.6%)	51 (14.8%)	131 (38.1%)	62 (18.0%)	29 (8.4%)	3.21	1.20

primary health care facilities							
Identification of safe spaces	116 (33.7%)	94 (27.3%)	66 (19.2%)	43 (12.5%)	25 (7.3%)	3.79	2.51
Supporting the inclusion of psychosocial considerations in social amenities	78 (22.7%)	85 (24.7%)	99 (28.8%)	51 (14.8%)	31 (9.0%)	3.37	1.24
Psychosocial support in education	100 (29.1%)	61 (17.7%)	99 (28.8%)	50 (14.5%)	34 (9.9%)	3.42	1.31
Strengthening of community and family support	109 (31.7%)	51 (14.8%)	101 (29.4%)	51 (14.8%)	32 (9.3%)	3.45	1.32

Source: Field Data (2021)

From Table 6.1, the study established that most of the respondents enlisted mental healthcare training n=122(35.5%), psychological support through help lines n=122(35.5%), identification of safe spaces n=116(33.7%), psychosocial support in education n=100(29.1%) and strengthening of community and family support n=109(31.7%) as not effective in addressing mental health problems in Kakuma refugee camp. However, a good number of the respondents as shown in the table were not sure of the effectiveness of the psychosocial interventions which in evaluative terms could easily go to the negative because usually people satisfied with a service will often state so with affirmation. There are some studies that concurred with this study.

6.2.1. Rehabilitation Programs

Rehabilitation programs was ranked highest on the very effective column of the psychosocial support interventions at n=68(19.8%).

A study by Khan and Amatya (2017) found that one in six refugees suffer from a physical health problem that significantly impacts their daily lives, and that two-thirds

of refugees endure mental health difficulties, highlighting the significance of rehabilitation. Priorities might also vary widely between populations and settings, thus there is no one-size-fits-all solution to addressing refugees' rehabilitation needs. In the field, trained medical personnel should conduct a thorough assessment of each patient's condition and prioritize rehabilitation based on those findings.

Patients' pre-treatment beliefs about recovery after rehabilitation have been found to influence rehabilitation outcomes (Personn & Gard, 2013). This explains the feedback given by some Focus Group participants who reported that those rehabilitation programs in the camp are only meant for people with disability (physical and mental).

"The services are just there, we don't use them because they're meant for crazy people", FGD participant, 18th august 2021. Another participant added, "We don't know for sure if rehabilitation services are effective because we only see that the number of patients keeps on increasing".

These findings support the feedback from the key informant interviews as follows.

> "There are psychosocial support interventions offered such as psychiatric rehabilitation. However, the mental health services are not up to date. Moreover, there's poor follow-up and people are not well-informed on mental health issues" (KRCS Mental health nurse, 2021).

6.2.2. Psychotropic Medications

As per the effectiveness of psychotropic medication, (19.5%) [n=67] ranked it as not effective and (30.2%) [n=104)], were not sure of the effectiveness clearly indicating that it is not an effective mode of intervention.

Based on the findings of this study, it is evident that administration of psychotropic medication is not popular in the refugee camp although some respondents [n=95] (27.6%) admitted to it being a bit effective and the fact that it exists as a mental health intervention strategy.

There is a lack of data on the efficacy of treating many patients with large doses of many psychotropic drugs over long periods of time. There is a need for more rigorous, controlled studies on psychotropic drugs' ability to control difficult behaviors because their effectiveness in doing so is best characterized as low (Matson and Neal, 2008).

According to feedback from Focus Group Discussions, it was alleged that psychotropic medication causes worsening of mental illnesses owing to no proper management and follow up by both the mental health practitioners and the patients themselves.

These findings were also supported by feedback from an interview with a key informant and it stated as follows:

> "There are no equipped mental health facilities and inadequate mental health professionals to administer proper psychotropic medical services, for instance. Therefore, poor medical services for mental health patients and prolonged mental illness" (KRCS mental health practitioner, 2021).

6.2.3. Psychosocial Counselling and Occupational Therapy

In regards to Psychosocial counselling and occupational therapy; [n=119] (34.6%) respondents were not sure about the effectiveness of psychosocial counselling and occupational therapy. This shows in totality a greater number that did not agree that psychosocial counselling and occupational therapy is an effective intervention in addressing mental health in Kakuma refugee camp. One of the Focus Group participants described the situation as follows:

"The mental health practitioners do not care to follow up with patients when they disappear, so the problem is barely solved. Those who are ill stay with their illness for prolonged periods of time until they commit suicide" (Respondent 7, FGD 4).

However, one participant claimed that counselling had worked for him alleging it to be effective for him.

An important first step in therapy is the generation of an interpersonal inventory assessment, which categorizes the patient's difficulties in social functioning into four categories: interpersonal disputes, role transitions, grief, and interpersonal deficits (Stuart & Robertson, 2012). One way therapy helps is by helping patients make connections between their emotional and interpersonal successes at the end of treatment and underlying issues like conflict, role shift, or loss.

Some treatments for promoting better mental health care in refugees have been offered by studies on the experiences of refugees and migrants with mental health problems (Giacco et al., 2014; Priebe et al., 2016). Refugees who have obvious mental health issues should be easier to treat if we can figure out how to remove the obstacles they face to receiving care (Priebe *et al*., 2013).

6.2.5. Case Management

In terms of Case management, an outstanding number of respondents [n=129] (37.5%) were not sure about the effectiveness of case management as a psychosocial support intervention. A participant in a Focus Group discussion said that he had never heard about case management in the camp. This evidently shows that case management has not been used effectively to address mental health issues in Kakuma refugee camp.

Table 6. 2: Coping Strategies to Enhance Healing

	1 (YES)	2 (NO)
Relaxation techniques such as meditation and taking deep breaths	212(61.6%)	132(38.4%)
Self-efficacy through exercising control in the face of stressful events	242(70.3%)	102(29.7%)
Religious and spiritual interventions	223(64.8%)	121(35.2%)
Physical exercise	252(73.3%)	92(26.7%)
Resilience through personal attitudes, skills and interaction with others	245(71.2%)	99(28.8%)
Seeking social support	225(65.4%)	119(34.6%)

Source: Field Data (2021)

In relation to which coping strategies respondents used to enhance coping, physical exercise; [n=252]73.3% was the most widely used coping strategy, followed by resilience through personal attitudes, skills and interaction with others; [n=245](71.2%) and self-efficacy through exercising control in the face of stressful events; [n=242] (70.3%). This is a clear indication that most respondents had a significant level of resilience which when tapped into through capacity building , for instance, will enhance progressive healing among vulnerable populations at risk in Kakuma refugee camp.

Mental health outcomes among refugees may be predicted in part by their level of resilience (Davydov *et al*., 2010; Schweitzer *et al*., 2007). The ability to bounce back rapidly from disease or major life changes, as well as to cope effectively in the face of adversity, trauma, tragedy, threats, or stressors, is an example of resilience.

As a result, members of the community can now play an integral role in both the diagnostic and treatment phases (Morgan, 2001; Harpham, and Few, 2002). Some stages, such as intervention design and execution, allow for patient involvement in health outcomes. Reaching out to the community, hosting workshops, developing train-

the-trainer models, finding jobs for refugees, and providing mentorship are all examples of community-based initiatives. All efforts are made with the intention of fostering positive social change and broadening participation (Stone 1992; Williams and Thompson 2011; Bolton *et al*., 2014).

Depression, anxiety, and post-traumatic stress disorder (PTSD) are just few of the many mental health conditions for which the efficacy of physical activity-based interventions (with or without integration of traditional therapy) has previously been thoroughly proven (Manger and Motta 2005; Carta *et al*. 2008; Mura and Carta 2013).

Illustrations of the connections between thoughts, behaviors, and feelings help in cognitive processing, and patients' descriptions of their own traumatic experiences help with trauma recovery (Buhmann *et al*. 2015; Lambert and Alhassoon, 2015).

6.3. Relationship between Psychosocial Wellbeing and Mental Health

The quantity of a variable's predictive power over another was calculated using regression analysis. To determine how much of the variance in the dependent variable (Mental Health) can be accounted for by the independent variable (Psychosocial Factors), a regression analysis was performed. The findings are displayed in Table 6.3.

Table 6. 3: Correlation Analysis of Psychosocial Wellbeing and Mental Health

Model Summary[b]										
				Std. Error	Change Statistics					
Model	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	**.575[a]**	**.330**	**.328**	**.65249**	**.330**	**168.616**	**1**	**342**	**.000**	**1.395**
a. Predictors: (Constant), Psychosocial										
b. Dependent Variable: Mental Health										

Source: Field Data (2021)

Study findings in Table 6.3 reveal an R square value of 0.330 signifying that 33.0% of the changes witnessed in mental health status of refugees in Kakuma refugee camp was a function of psychosocial wellbeing. This implies that the remaining 67% unexplained variance in mental health status of refugees was a function of other factors that affect mental health but were not part of the study. Such factors are explained by the error term.

Table 6. 4: Effect of Psychosocial Factors on Mental Health

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	71.788	1	71.788	168.616	.000b
	Residual	145.606	342	.426		
	Total	217.393	343			

a. Dependent Variable: Mental Health
b. Predictors: (Constant), Psychosocial

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.311	.205		-1.516	.130
	Psychosocial	.920	.071	.575	12.985	.000

a. Dependent Variable: Mental Health

Source: Field Data (2021)

The Analysis of variance Output in Table 6. 4 revealed an F value of 168.616, which was significant at 99% confidence interval with a P value of 0.000 implying that the research model was well fitted to predict mental health based on psychosocial wellbeing. Coefficients of the variable are as shown in table 6.4.

The results in table 6.4 revealed a beta coefficient of 0.575 with a P value of 0.000 which was significant at 99% confidence interval. This implies that psychosocial wellbeing was a useful predictor of mental health among refugees in Kakuma Refugee camp. The regression equation to estimate the mental health because of changes in the

psychosocial wellbeing was stated as: Y= -0.311+ 0.920 PSW +Ɛ where Y = Mental Health, PSW = Psychosocial Wellbeing and Ɛ = error term.

In an effort to prevent or identify the earliest signs of mental illness, community-oriented intervention has been undertaken among young immigrants in the United States during the initial phases of resettlement. Weine et al. (2006), Weine (2008), Weine (2011), and Dura-Vila *et al.*, (2013) found that community-based mental health services appear more effective than the conventional primary care paradigm. Refugee youth, in particular, benefit from community collaboration because it reduces their feelings of isolation and discrimination while also improving their access to information and resources (Birman et al. 2008; Tyrer & Fazel 2014).

Some studies have indicated that refugees do not seek mental health support when needed Fung & Wong, 2007; de Anstiss et al., 2009; Na, Ryder, & Kirmayer, 2016). Further, numerous studies were conducted,highlighting barriers that hamper refugees' mental health help-seeking (Reynders,Kerkhof, Molenberghs, & Van Audenhove, 2014; Schomerus & Angermeyer, 2008). Nonetheless, few studies have confirmed the efficacy of preventative initiatives on the health of refugees (Kirmayer *et al*., 2011).

Refugees do not get adequate and meaningful assistance with their mental health needs due to lack of understanding of the mental health illness symptoms. Moreover, mental health support providers lack of understanding of the refugees' cultural background is also a contributing factor to the inadequacy of services provided to refugees and asylum seekers which may prevent them from seeking help or pursuing treatment (Ndikumana, 2019).

Education about mental health, as well as emotional, social, and economic support, might help prevent the incidence of mental disorders among migrants, as can removing

barriers to conventional Western mental health treatments and protecting migrants' human rights (Porter, 2007).

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1. Summary of Findings

In regard to objective one, study findings indicated that the refugees were socio-economically disadvantaged as is indicated by high dependency levels on humanitarian aid [n=205] (approximately 60%), low income levels [n=205] (60% with no income), inadequate shelter [n=160] (47%) and food supply [n=163] (47.4%), poor infrastructure[n=165] (48%), poor social support systems as evidenced by resettlement and acculturation challenges [n=214] (62.2%), disruption of family and community systems]n=200] (58.1%) and restrictions on capacity to work [n=219] (63.7%).

The study revealed a statistically significant association between socio economic factors and mental health among vulnerable populations at risk in Kakuma refugee camp. Specifically, the study data revealed an r square value of 0.20 signifying that 20.0% of the variance witnessed in mental health of the refugees was a result of socio-economic factors.

In reference to the second objective on the psychosocial wellbeing of refugees, study findings indicate a significant rate of physical and emotional trauma from experiences of SGBV [n=169] (49.1%), imprisonment [n=216] (62.8%), forced labour [n=226] (65.7%) and brainwashing [n=196] (57%), anxiety from outstanding numbers of respondents reporting anxiety symptoms such as heart pounding [n=153] (44.5%), feeling tense [n=145] (42.2%) and trembling [n=145] (42.2%) and consequently depression from reported symptoms such as though of ending one's life [n=189] (55%), crying easily [n=149] (43.3%) and feeling low in energy [n=146] (42.4%).

As per objective two, it is evident from the findings that were extracted from self-reported techniques, that most refugees and asylum seekers are considerably psychologically and emotionally distressed. This is shown from the results acquired from validated, standardized tools to assess mental health outcomes such as, in this case, symptoms of Post-Traumatic Stress Disorder (PTSD), anxiety and depression which according to research are the most prevalent mental health illnesses among refugees and asylum seekers. In this study, a refugee who is either an orphan, living with disability and/or chronic illness, teenage mother or elderly is at a greater risk of deteriorating mental health as compared to other refugees.

Study findings also revealed an R square value of 0.330 signifying that 33.0% of the changes witnessed in mental health status of refugees in Kakuma refugee camp was a function of psychosocial wellbeing. This implies that the remaining 67% unexplained variance in mental health status of refugees was a function of other factors that affect mental health but were not part of the study. Such factors are explained by the error term.

Lastly, for objective three, evaluation of the psychosocial support interventions applied in addressing the mental health of vulnerable populations at risk in Kakuma refugee camp, the study found out the following:

Most of the respondents enlisted mental healthcare training n=122(35.5%), psychological support through help lines n=122(35.5%), identification of safe spaces n=116(33.7%), psychosocial support in education n=100(29.1%) and strengthening of community and family support n=109(31.7%) as not effective in addressing mental health problems in Kakuma refugee camp. However, a good number of the respondents as shown in the table were not sure of the effectiveness of the psychosocial interventions

which in evaluative terms could easily go to the negative because usually people satisfied with a service will often state so with affirmation.

For psychosocial support interventions applied in addressing mental health problems, the study findings indicate that providing psychological support through help lines was (cumulatively) ranked as the least effective intervention [n=66] while rehabilitation programs was (cumulatively) ranked as the most effective [n=107].

In relation to which coping strategies respondents used to enhance coping, physical exercise; [n=252]73.3% was the most widely used coping strategy, followed by resilience through personal attitudes, skills and interaction with others; [n=245](71.2%) and self-efficacy through exercising control in the face of stressful events; [n=242] (70.3%). This is a clear indication that most respondents had a significant level of resilience which when tapped into through capacity building , for instance, will enhance progressive healing among vulnerable populations at risk in Kakuma refugee camp.

Findings revealed that a beta coefficient of 0.575 with a P value of 0.000 which was significant at 99% confidence interval. This implies that psychosocial wellbeing was a useful predictor of mental health among refugees in Kakuma Refugee camp.

7.2. Conclusions

In line with the first objective, the study concludes that, majority of the refugees and asylum seekers, especially orphans, PWDs, the elderly and teenage mothers are socially and economically disadvantaged as compared to other refugees. In addition, those affected faced economic hardship, social disparity, and have limited access to sources of livelihood. Poor socio-economic conditions lead to stressful lives which in turn contribute to a deterioration of their mental health.

In regard to the second objective, the study concludes that, majority of the vulnerable populations at risk (VPR) among refugees have experienced emotional and psychological trauma thus negatively influencing their mental well-being. Moreover, due to poor emotional and psychological support structures in the camps, majority of the refugees have experienced PTSD, anxiety and consequently depression as some have witnessed murder, forced eviction and discrimination. This therefore indicates poor psychosocial well-being which if left unaddressed could easily lead to mental morbidity and eventually, mortality.

Lastly, with respect to the third objective, the study concludes that, some of refugees are aware of coping strategies and interventions. However, they lack the knowledge of the symptoms of mental health illnesses and are therefore likely to seek help long after the illness has manifested making it difficult to treat the mental health illnesses. There is inadequate resources to sufficiently implement the coping strategies. Furthermore, the psychosocial support interventions applied in addressing mental health in the camps have proved inadequate due to for example, the mental health practitioners' lack of sufficient knowledge of the cultural backgrounds of the refugees which impact their mental health and hence less effective.

Further, there is an evident lack of specialized treatment services for refugees due to a limited number of specialized professionals working with this target population. Therefore, there is an evident gap between the local health system and perceived needs of vulnerable populations at risk amongst refugees.

Overall conclusion of the study was that the mental health of vulnerable populations at risk is affected in varying magnitudes depending on age, social status, gender and health among other risk factors that this study has suggested for further research. The study

findings offer psychosocial interventions based on a transdisciplinary approach for sustainable solutions towards addressing the mental health of vulnerable populations at risk among refugees in Kakuma camp. This study recommends prioritized socio-economic empowerment of the refugees, timely addressing of their psychosocial wellbeing, specialized psychosocial support interventions and a holistic approach in formulation of policies and procedures to safeguard the mental health of vulnerable populations at risk in Kakuma refugee camp.

The study indicates that promises of long-term benefit may indicate an excessive focus on the narrative of long-term resilience rather than the story of immediate relief of suffering. The study suggests that a reasonable baseline assumption for the discipline would be to frame psychosocial interventions as aiding distressed people rather than proving their worth over the long term. It is not that long-term benefits are impossible to achieve; however, it may be more appropriate to evaluate psychosocial interventions in the same way that food, shelter, and the vast majority of health interventions are evaluated: based on their ability to reduce suffering and risk among affected populations during an emergency, rather than on their impact on the population's long-term prospects for food security, settlement, or physical well-being.

7.3. Recommendations

The following recommendations were made based on the study findings and conclusions:

It is recommended that policies and operational procedures be put in place to safeguard vulnerable populations at risk during conflict, flight and resettlement to alleviate their suffering. Consequently, those affected by conflict and natural disasters need socio-

economic empowerment that would be useful in pulling them out of imminent danger of economic hardship and consequent mental health crises.

The study found that majority of the respondents had experienced emotional and psychological trauma thus negatively influencing their mental well-being as is indicated by the development of other mental health illnesses such as anxiety and depression which cripple their productivity. In line with this finding, it is recommended that emotional and psychological support in the form of specialized psychosocial support services be availed to affected individuals to enhance healing and coping. Those that experienced trauma because of having witnessed murder and forced eviction be assisted to effectively pull through distress to regain normal functioning.

The study also revealed that majority of respondents were aware of coping strategies and psychosocial support interventions but lacked adequate resources to sufficiently implement them. A recommendation is made that in addition to more awareness creation on available psychosocial support interventions and coping strategies, deliberate efforts be made for resource endowment for survivors of violence to enhance coping mechanisms.

Based on the findings of the research, it is clear that there is a gap in the availability of specialized mental healthcare services for refugees. Instead of tailoring mental health treatments to the specific barriers and requirements of a newly identified demographic, it is proposed that a greater openness to novel approaches be fostered.

7.4 Suggestions for Further Research

The present study explored psychosocial factors influencing mental health of vulnerable populations at risk in Kakuma refugee camp, Kenya.

i. A similar study on other factors influencing mental health of refugees may be undertaken in other refugee camps around the country and findings compared to those of this study. This will stretch the frontiers of knowledge on the psychosocial factors influencing mental health of vulnerable populations at risk in refugee camps generally.

ii. Another study may be conducted on the factors that enhance coping and resilience among the at-risk populations in refugee camps. This will provide information that would be helpful to individuals that face violent situations on a day-to-day basis in refugee camps.

iii. Further still, a study needs to be conducted on factors inherent in specific segments of the refugee population that make them significantly vulnerable during natural disasters, conflicts, and displacement. This will help to enhance psychosocial support interventions and coping mechanisms for vulnerable populations at risk in future displacement crises.

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APPENDICES

Appendix I: Introduction Letter

Dear respondent,

I am a student at Masinde Muliro University of science and technology in the Department of Emergency Management Studies bearing registration number CDM/G/01-56652/2017. Currently, I am undertaking a master's degree in Disaster Management and Humanitarian Assistance. I am carrying out a research on ***Psychosocial Factors Influencing the Mental Health of Vulnerable Populations in Kakuma Refugee Camp, Turkana County, Kenya.***

I am using the research instruments to collect information for the study. It is my kind request that you provide the relevant information required as objectively and honestly as possible. The information provided will be treated with strict confidentiality for the purpose of this study only.

Yours faithfully,

Aisha Zainab Harun

Appendix II: Questionnaire for Household Heads

INSTRUCTIONS

Kindly answer all questions

SECTION A: BACKGROUND INFORMATION

1. Gender of the respondent: Male ( ) Female ( ) Transgender ( )
2. Nationality of the respondent : Somali ( ) Congolese ( ) Ethiopian ( ) Burundian ( ) Sudanese ( ) Ugandan ( ) Rwandese ( ) S.Sudan ( ) others ( )
3. Education level of the respondent: Primary ( ) Secondary ( ) Tertiary ( ) Other ( )
4. Age of the respondent: 18-21 ( ) 22-29( ) 30-40 ( ) 41- 50 ( ) above 51( )
5. Marital status of the respondent: never married ( ) married ( ) widowed ( ) separated/divorced ( )
6. Duration of residence in the camp in years: 1-5 ( ) 6-10 ( ) Borehole ( ) 11-15 ( ) 16-20 ( ) above 20 ( )
7. Camp of residence : Kakuma 1 ( ) Kakuma 2 ( ) Kakuma 3 ( ) Kakuma 4 ( )
8. Disability: Yes ( ) No ( )
9. Source of livelihood: informal employment ( ) Formal employment ( ) Business ( ) Humanitarian aid ( )
10. Monthly income: Below 3000 ( ) 3000-10000 ( ) 10001- 20000 ( ) above 200021( )

Psychosocial well-being checklist

		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
	Emotional well-being					
	I feel happy					
	I feel pleased, full in life and satisfied					
	Psychological well-being					
	I maintain a positive attitude towards myself and past life					
	I have warm, satisfying and trustful relationships and I am emphatic					
	I can manage a complex environment to suit my needs					
	I have potential for personal growth					
	I can direct myself in accordance with my own socially accepted internal standards					
	Social well-being					
	I feel that my life contributes to society and is valued by others					
	I feel a sense of belonging to the community					
	I hold a positive attitude towards people's differences					
	I am able to make meaning of what is happening in society					
	I believe that people have potential and can grow positively					

a) Please indicate if you have any chronic illness.

Yes **( )** No (**)**

If yes, specify.

…….

SECTION B: Influence of Socio-economic factors on the mental health of vulnerable populations in Kakuma refugees' camp

I.Social support, influence, connections, and integration

1. Please rate the following social support structures and services in terms of availability and access in the camp. Tick in the table as appropriate.

1= strongly disagree 2= disagree 3= Not sure 4= agree 5= strongly agree

		1	**2**	**3**	**4**	**5**
a.	There is adequate food supply					
b.	The emergency shelter conditions are appropriate					
c.	There are adequate educational opportunities					
d.	Quality essential healthcare services are provided					
e.	Safety from violence is guaranteed in the camps					
f.	Public infrastructural system is reliable					
g.	Services are provided in a timely manner					

II. Events of social disparities

2. Please indicate using the scale if you have experienced any of the following

1= Disagree 2=Not sure 3=Agree

		1	2	3
a.	Uncertainty during asylum seeking process			
b.	Discrimination and social exclusion			
c.	Restrictions on capacity to work			
d.	Resettlement and acculturation challenges			
e.	Violence, threats, or conflicts in the community			
f.	Grief from the loss of loved ones			
g.	Adjusting to and dealing with life in the camp (including missing home and lifestyle)			
h.	Disruption of family support, social networks and community structures			

III.Economic hardship

3. To what extent have the following been a problem to your wellbeing?

1= No problem at all 2= Minor problem 3= Problem 4= Serious problem 5= Very serious problem

		1	2	3	4	5
a.	Obtaining employment					
b.	Financial constraints in funding daily expenditures					
c.	Limited opportunities to generate income					
d.	Access to land for farming					
e.	Housing affordability					

4. What implication do the above socio-economic factors have on your mental health? Rate using the scale below whereby:

1= strongly disagree 2= disagree 3= undecided 4= agree 5= strongly agree

		1	2	3	4	5
a.	I feel stressed to an extent I can't carry out daily activities					
b.	I get overwhelmed by anxiety					
c.	I resort to drug and substance abuse					
d.	I have trouble sleeping					
e.	I feel irritable and angry					
f.	I feel depressed					
g.	I feel detached and withdrawn from people					
h.	I feel hopeless and uncertain about the future					

SECTION C: Exploration of the psychosocial wellbeing aspect of vulnerable populations in Kakuma refugee camp

Knowledge and Attitudes about Mental health

	Do you agree or disagree?	**Strongly disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly agree**
	I understand what the words "mental health" mean					
	"Mental health" can be positive. It means psychological wellbeing; it is important for everyone.					
	"Mental health" is negative. It really only means psychological illnesses or problems.					
	To deal with trauma, it helps to think or talk about what happened.					
	Mental health problems are shameful or a sign of weakness or failure.					
	It is good to talk to my family about my mental health.					
	I know and use healthy strategies to cope with negative thoughts or feelings what has happened to me.					
	People with mental health problems are all crazy					
	I feel I can depend on my community to help me cope with on-going challenges, stress or worries.					
	A lot of people in this community are struggling with mental health issues					

Physical and social factors (History of torture)

2. Please indicate whether you have experienced any of the following events (check YES or NO)

		Yes	**Undecided**	**No**
a.	Sexual and Gender-based Violence			
b.	Serious physical injury from combat situation			
c.	Imprisonment			
d.	Destruction of personal property			
e.	Forced evacuation under dangerous conditions			
f.	Murder, or death due to violence, of spouse, child, family member or friend			
g.	Forced to physically harm family member or friend			
h.	Forced labour (like animal or slave)			
i.	Extortion or robbery			
j.	Brainwashing			

Emotional and Psychological factors

3. Using the scale please rate according to how you have been feeling.

	Symptom	**None of the time (1)**	**A little bit of the time(2)**	**A good bit of the time (3)**	**Most of the time (4)**	**All of the time (5)**
a.	Sadness					
b.	Irritable					
c.	Feelings of numbness or emotional emptiness					
d.	Self-harming thoughts					
e.	Trouble sleeping					
f.	Less interest in daily activities					
g.	Feeling exhausted most of the time					
h.	Feeling a need for revenge					
i.	Sudden emotional or physical reaction when reminded of the most hurtful or traumatic event					
j.	Feeling detached or withdrawn from people					

4. Listed below are symptoms or problems that people sometimes have. Please read each one carefully and describe how much the symptoms bothered you or distressed you. Place a check in the appropriate column.

		None of the time(1)	**A little bit of the time (2)**	**A good bit of the time (3)**	**Most of the time (4)**	**All of the time (5)**
a.	Feeling tense					
b.	Heart pounding or racing					
c.	Suddenly scared for no reason					
d.	Spell of terror or panic					
e.	Nervousness or shakiness inside					
f.	Feeling fearful					
g.	Headaches					
h.	Feeling restless or can't sit still					
i.	Faintness, dizziness or weakness					
j.	Trembling					

5. How best do you describe your low moments? Place a check in the appropriate column.

		Not at all	**A little**	**Quite a bit**	**Extremely**
k.	Thought of ending your life				
l.	Feeling of worthlessness				
m.	Worry too much about things				
n.	Feeling everything is an effort				
o.	Blaming yourself for things				
p.	Difficulty falling asleep				
q.	Feeling lonely				
r.	Feeling low in energy				
s.	Crying easily				
t.	Loss of sexual interest or pleasure				

SECTION D: Evaluation of the psychosocial support interventions applied in addressing the mental health of vulnerable populations at risk in Kakuma refugee camp.

1. Please rate the following psychosocial support interventions according to their effectiveness in addressing the mental health issues of vulnerable populations at risk in Kakuma refugee camp?

	Item	Not effective (0)	A bit effective (1)	Not sure (2)	Effective(3)	Very effective (4)
a.	Rehabilitation programs					
b.	Psychotropic medications					
c.	Psychosocial counselling and occupational therapy.					
d.	Case management (mental health)					
e.	Community awareness about coping with distress					
f.	Mental health care training in Psychological First aid and basic psychosocial skills					
g.	Providing psychological support through helplines					
h.	Access to clinical services provided in primary healthcare facilities					
i.	Identification of safe spaces					
j.	Supporting the inclusion of social/ psychological considerations in protection, health services, nutrition, food aid, shelter, site planning, or water and sanitation					
k.	Psychosocial support in education					
l.	Strengthening of community and family support					

1. Are you aware of any other psychosocial support approaches/strategies that are being implemented to address mental health issues of vulnerable populations at risk in Kakuma refugee camp?

   Yes **( )** No (**)**

   If yes, list them.

   …….

   …….

Coping strategies to enhance healing

2. Please indicate what you do to feel better when you feel psychologically and emotionally distressed.

		YES	NO
a.	Relaxation techniques such as meditation and taking deep breaths		
b.	Self-efficacy through exercising control in the face of stressful events		
c.	Religious and spiritual intervention		
d.	Physical exercise		
e.	Resilience through personal attitudes, skills and interaction with others		
f.	Seeking social support		

If any other, kindly explain:

…….

…….

…….

4. To what extent do you believe in the effectiveness of Mental Health and Psychosocial Support (MHPSS) services to the vulnerable populations in Kakuma refugee Camp?

Very Good=5 ( ) Good =4 ( ) Not sure=3 ( ) Poor = 2( ) Very poor=1 ( )

5. Are there any challenges you face in receiving the mental health support services at the camp?

Yes **( )** No (**)**

If yes, which ones?

…….

…….

…….

…….

This is the end of the questionnaire. Thank you very much for your responses!

APPENDIX III: Interview Guide for Humanitarian Officers (Kakuma) and Government Officers/County officers

This interview guide is part of the field work for my Master degree at Masinde- Muliro University. The research seeks to understand the **Influence of Psychosocial Factors on the Mental Health of Vulnerable Populations in Kakuma Refugee Camp, Kenya**. The researcher assures the respondent that information obtained during the interview will be used strictly for the above-mentioned purpose. Your cooperation is greatly appreciated. Thank you.

1. What do you understand by the term psychosocial factors?

……

……

……

2. What do you understand by the term Mental Health?

……
……
……

3. a) Do you agree that psychosocial factors influence the mental wellbeing of vulnerable populations in Kakuma refugee camp?

   b) Explain your answer:

……
……
……

4. To what extent do you think the socio-economic status of the vulnerable populations affects their mental health?
   A great extent ( ) A considerable extent ( ) A moderate extent ( ) A small extent ( ) Not at all ( )

5. Please specify in what way the following socio-economic factors affect the mental health of vulnerable populations in Kakuma refugee camp:

a) Income status

……
……

…….
…….
…….

b) Education level

…….
…….
…….
…….
…….

c) Health inequalities

…….
…….
…….
…….
…….

d) Economic hardship

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…….
…….
…….
…….

e) Access to basic commodities and services

…….
…….
…….
…….
…….

6. What can you say about daily stressors that affect the vulnerable populations at the Kakuma refugee camp right now?

b) If yes, explain your answer:

…….
…….
…….
…….
…….

7.Do you think that the vulnerable populations at the refugee camp are emotionally and psychologically affected?

Yes **( )** No (**)**

Explain your answer:

…….

…….
…….
…….
…….
a) Are there any signs and symptoms/behavioral changes indicating emotional and psychological distress exhibited among the refugee vulnerable populations?
Yes **( )** No (**)**

If yes, explain your answer:
……
……
…….
……
……

7 To what extent do you think the vulnerable population at the refugee camp has been emotionally and psychologically affected?
A great degree ( ) A considerable degree ( ) A moderate degree ( ) A small degree ( ) Not at all ( )

8 Could you say that the situation at the refugee camp has contributed to deterioration of the mental health of vulnerable populations?
Yes **( )** No (**)**

Explain your answer:
……
……
…….
……
……

9 Are there any Mental Health and Psychosocial Support services available at the Kakuma refugee camp?
Yes **( )** No (**)**

Kindly elaborate your answer above.

…….……
…….

…….

…….

…….

11. Do the vulnerable populations seek mental health care services at the refugee camp?

Yes **( )** No (**)**

If no, what could be some of the reasons causing that?

…….
…….
…….
…….
…….

How long has your organization worked at the refugee camp?

……

12. What role does your organization play in addressing the mental health problems of vulnerable populations at risk in Kakuma refugee camp?

……
……
……
……
……

13. What challenges are experienced in addressing the mental health problems of the vulnerable population at risk in Kakuma refugee camp?

…….
……
……..…….
……
……..

14. In your own opinion, how effective are the approaches in addressing the mental health issues of the vulnerable populations?

…….
…….……
…….
…….
……..

Appendix IV: Interview guide for mental health practitioners, Aid workers and Care givers

1. What do you understand by the term psychosocial factors?
2. What do you understand by mental health?
3. How long have you and/or your organization been present/working in Kakuma?
4. In your opinion, in what way do you think the socio-economic status of refugees affect their mental health?
5. In what way has the refugee camp set up and environment impacted the mental health of the vulnerable populations at risk?
6. What approaches and strategies have been used to address the mental health problems of the population at risk at the refugee camp?
7. To what extent have these approaches and strategies been effective in addressing the mental health problems of refugees?
8. What kind of personal coping strategies and mechanisms do the refugees use to deal with mental health problems?
9. What kind of coping strategies and mechanisms do you suggest to the refugees with mental health problems to enhance their healing process?
10. How frequent are mental healthcare services offered?
11. How often do the refugees seek mental healthcare services?
12. Approximately, how many refugees seek mental healthcare services in a week?

What psychological problems, do you think, has the vulnerable populations been highly exposed to as a result of the crises?

	Psychological problem experienced		
	Psychological Trauma		
	Depression		
	Psychosis		
	Problems with alcohol and drug use		
	Post-traumatic stress disorder		
	Acute trauma-induced anxiety that is so severe that it limits basic functioning		
	Self-harm/ suicide		
	Medically unexplained somatic complaints		

Appendix V: Focus Group Discussion Guide

1. What do you understand by the term psychosocial factors?
2. What do you understand by mental health?
3. In terms of the quality of life at the camp, what can you say are your most distressing issues?
4. According to you, in what way do aspects such as level of education, source of income, refugee status i.e. socio-economic status determine the availability and accessibility of basic needs and services for refugees?
5. In what ways does the socio-economic status of refugees influence their emotional and mental well-being?
6. What is your opinion on the level of distress in terms of when you arrived at the camp and right now?
7. How do you manage emotional and psychological distress?
8. What approaches and mechanisms are available at the camp to help you manage emotional and psychological distress?
9. In your opinion, how effective are these approaches in addressing the mental health problems of the refugees?
10. What challenges have you encountered in terms of accessing mental health care services at the refugee camp?
11. How would you rate the experiences you encountered during the following periods on your emotional and mental well-being?

Very Bad= 1 Bad = 2 Not sure = 3 Good = 4 Very Good = 5

		1	**2**	**3**	**4**	**5**
a.	Pre-migration/crisis period					
b.	Flight period					
c.	Post–migration period					

a) Do you still encounter some/all of these experiences in the camp?

Yes **( )** No **( )**

If yes, please elaborate;

…….

…….

…….

……

Any other situation that was very frightening or in which you felt your life was in danger.

Yes **( )** No (**)**

If yes, specify:

…….

…….

…….

……

12.) Are there any other frustrations that you may have encountered in regard to availability and access of social support structures?
Yes **( )** No (**)**

Please explain;

…….

…….

…….

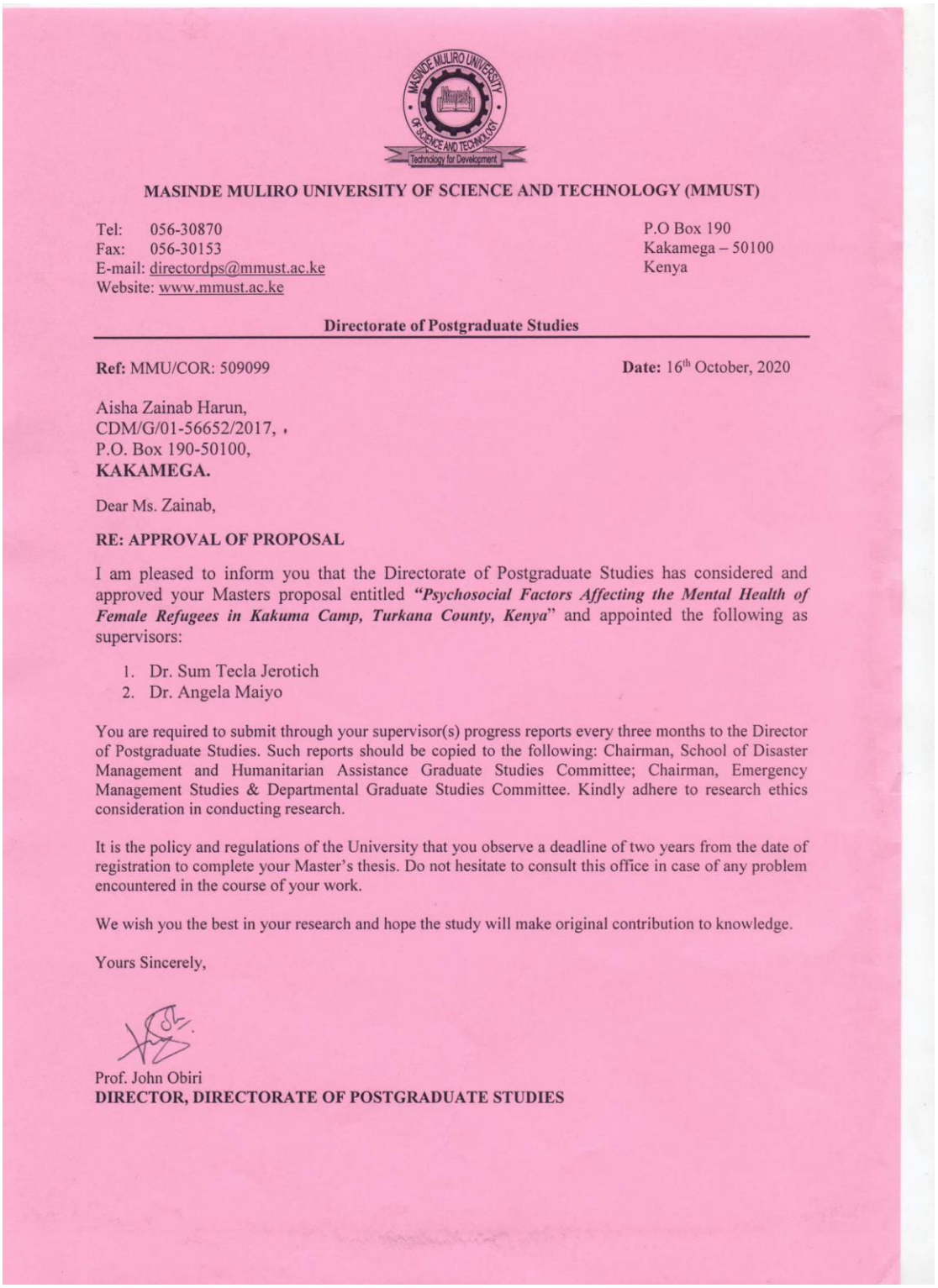
…….

Appendix VI: Observation Checklist

The researcher will observe the following items in the field

No	ITEM	Excellent (5)	Very good (4)	Good (3)	Bad (2)	Very bad (1)
	Socio-economic conditions					
	Basic needs (food, shelter, clothing)					
b.	Educational facilities					
c.	Health facilities and services					
d.	Safety and security					
e.	Housing and infrastructure					
	Socio-cultural factors					
a.	Social interaction					
b.	Respect for cultural diversity					
c.	Acculturation efforts					
d.	Attitude towards host population					
e.	Social cohesion					
	Psychological factors					
a.	Mood					
b.	Self-esteem					
c.	Positive emotions					
d.	Sense of coherence and trust					
e.	Perceived control					

Appendix VII: MMUST Approval Letter



MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

Tel: 056-30870
Fax: 056-30153
E-mail: directordps@mmust.ac.ke
Website: www.mmust.ac.ke

P.O Box 190
Kakamega – 50100
Kenya

Directorate of Postgraduate Studies

Ref: MMU/COR: 509099 **Date:** 16th October, 2020

Aisha Zainab Harun,
CDM/G/01-56652/2017, ,
P.O. Box 190-50100,
KAKAMEGA.

Dear Ms. Zainab,

RE: APPROVAL OF PROPOSAL

I am pleased to inform you that the Directorate of Postgraduate Studies has considered and approved your Masters proposal entitled ***"Psychosocial Factors Affecting the Mental Health of Female Refugees in Kakuma Camp, Turkana County, Kenya"*** and appointed the following as supervisors:

1. Dr. Sum Tecla Jerotich
2. Dr. Angela Maiyo

You are required to submit through your supervisor(s) progress reports every three months to the Director of Postgraduate Studies. Such reports should be copied to the following: Chairman, School of Disaster Management and Humanitarian Assistance Graduate Studies Committee; Chairman, Emergency Management Studies & Departmental Graduate Studies Committee. Kindly adhere to research ethics consideration in conducting research.

It is the policy and regulations of the University that you observe a deadline of two years from the date of registration to complete your Master's thesis. Do not hesitate to consult this office in case of any problem encountered in the course of your work.

We wish you the best in your research and hope the study will make original contribution to knowledge.

Yours Sincerely,

Prof. John Obiri
DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES

Appendix VIII: NACOSTI permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 169941

Date of Issue: 23/November/2020

RESEARCH LICENSE

This is to Certify that Miss.. Aisha Harun of Masinde Muliro University of Science and Technology, has been licensed to conduct research in Turkana on the topic: Psychosocial factors affecting mental health of female refugees in Kakuma camp Turkana County, Kenya for the period ending : 23/November/2021.

License No: NACOSTI/P/20/7808

169941

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
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7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Waiyaki Way, Upper Kabete,
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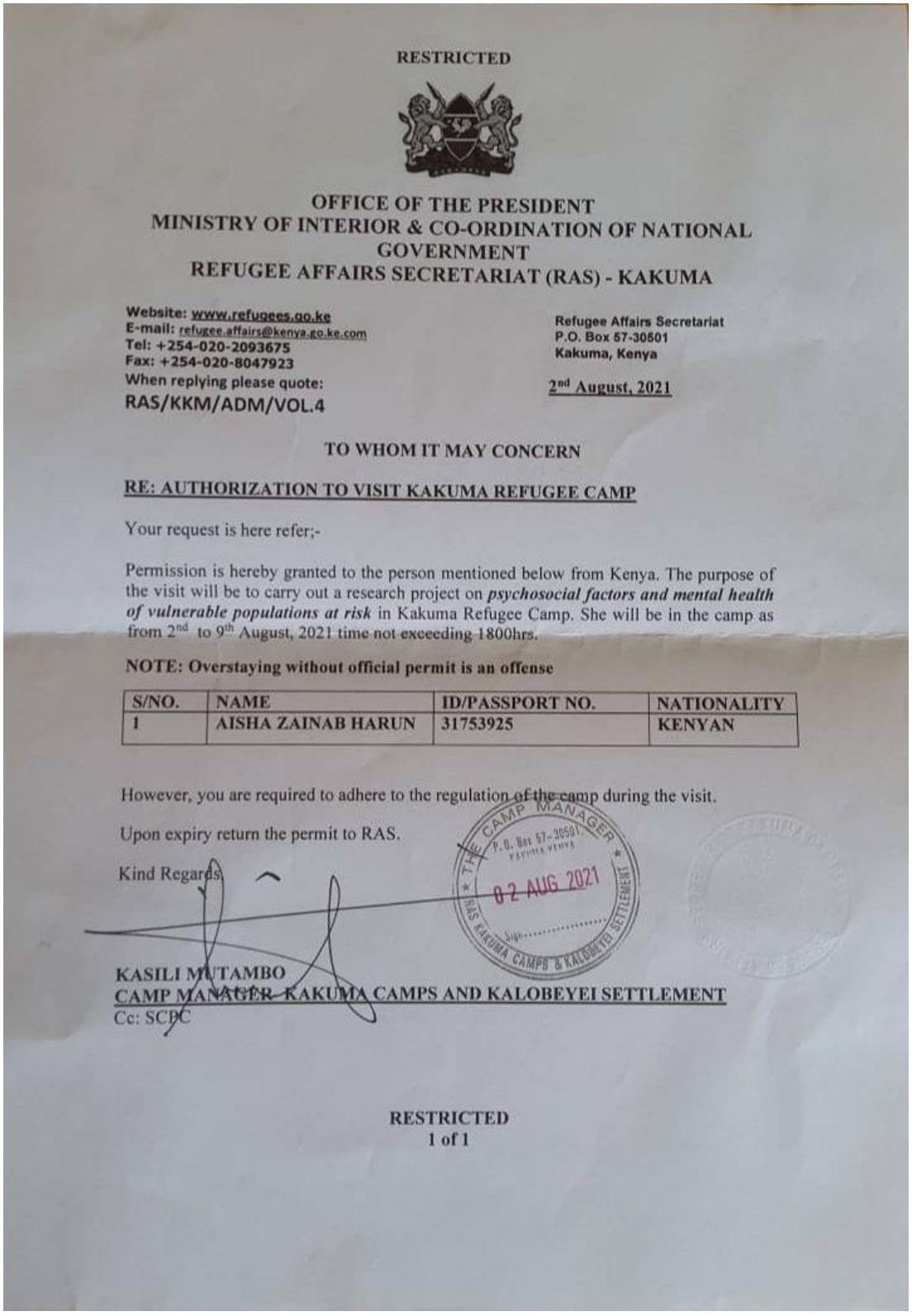
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix IX: SAMPLING TABLE for determining finite population

Recommended Sample sizes for two different precision levels Isaac and Michael, 1981; Smith, M. F., 1983					
	Sample Size			**Sample Size**	
Population Size	**+5%**	**10%**	**Population size**	**5%**	**10%**
10	10		275	163	74
15	14		300	172	76
20	19		325	180	77
25	24		350	187	78
30	28		375	194	80
35	32		400	201	81
40	36		425	207	82
45	40		450	212	82
50	44		475	218	83
55	48		500	222	83
60	52		1000	286	91
65	56		2000	333	95
70	59		3000	353	97
75	63		4000	364	98
80	66		5000	370	98
85	70		6000	375	98
90	73		7000	378	99
95	76		8000	381	99
100	81	51	9000	383	99
125	96	56	10000	385	99
150	110	61	15000	390	99
175	122	64	20000	392	100
200	134	67	25000	394	100
225	144	70	50000	397	100
250	154	72	100000	398	100

Appendix X: **PLATES SHOWING RESEARCHER DURING FGD SESSIONS IN KAKUMA REFUGEE CAMP**

Appendix XI: ACCESS PERMIT TO KAKUMA REFUGEE CAMP



RESTRICTED

OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR & CO-ORDINATION OF NATIONAL GOVERNMENT
REFUGEE AFFAIRS SECRETARIAT (RAS) - KAKUMA

Website: www.refugees.go.ke
E-mail: refugee.affairs@kenya.go.ke.com
Tel: +254-020-2093675
Fax: +254-020-8047923
When replying please quote:
RAS/KKM/ADM/VOL.4

Refugee Affairs Secretariat
P.O. Box 57-30501
Kakuma, Kenya

2nd August, 2021

TO WHOM IT MAY CONCERN

RE: AUTHORIZATION TO VISIT KAKUMA REFUGEE CAMP

Your request is here refer;-

Permission is hereby granted to the person mentioned below from Kenya. The purpose of the visit will be to carry out a research project on ***psychosocial factors and mental health of vulnerable populations at risk*** in Kakuma Refugee Camp. She will be in the camp as from 2nd to 9th August, 2021 time not exceeding 1800hrs.

NOTE: Overstaying without official permit is an offense

S/NO.	NAME	ID/PASSPORT NO.	NATIONALITY
1	AISHA ZAINAB HARUN	31753925	KENYAN

However, you are required to adhere to the regulation of the camp during the visit.

Upon expiry return the permit to RAS.

Kind Regards

THE CAMP MANAGER P.O. Box 57-30501 REFUGEE KENYA 02 AUG 2021 RAS KAKUMA CAMPS & KALOBEYEI SETTLEMENT

KASILI MUTAMBO
CAMP MANAGER- KAKUMA CAMPS AND KALOBEYEI SETTLEMENT
Cc: SCDC

RESTRICTED
1 of 1