

**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA**



**MENTAL HEALTH PROBLEMS AMONGST PEOPLE LIVING WITH HIV AT
37 MILITARY HOSPITAL, ACCRA.**

BY

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**THIS DISSERTATION IS SUBMITTED TO THE SCHOOL OF PUBLIC
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DECLARATION

DECLARATION

I BENEDICTA ENYONAM NKORNOO-AZASOO do hereby declare that, this thesis was independently done by me under supervision. References and quotation from other materials in relation to this subject area have been duly acknowledged, I further declare that this work has not been submitted for the award of any degree in this university or elsewhere.



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DEDICATION

I dedicate this work to Mr. Okyere Boateng and my late father Mr. Hope Yaw Nkornoo-Azasoo for all the support, encouragement and putting his trust in me but could not live to see it.

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ABSTRACT

Background: Human Immunodeficiency Virus (HIV) is an infection that can lead to AIDS and is a virus that breaks down certain cells of the human immune system that help the body fight infections, making a person more susceptible to having mental health problems. People living with HIV (PLWH) are at higher risk of developing mental health problems compared with the general population. Mental health problems amongst people living with HIV have a negative impact towards seeking treatment, adherence to treatment and quality of life. This study sought to explore the mental health problems experienced by PLWH at the 37 military hospital in Accra, Ghana

Method: A qualitative research method was used in this study. A purposive sampling technique was employed to purposively select PLWH receiving antiretroviral therapy (ARTs) from the 37 military hospital. Semi-structured interview guide was used to conduct in-depth interviews with 17 participants. Data recorded (audio and written) was transcribed and coded. Themes and concepts were generated using thematic analysis method.

Results: The results showed that the psychosocial factors that are associated with mental health problems amongst people living with HIV include: sadness (depression); societal rejection; suicidal thoughts; drunkenness; sleeplessness; inferiority complex; and shame. The study also revealed that the major coping strategies that have been developed by people living with HIV in order to address their mental health problems include: prayer to God and trust in His protection; engagement of other people for happiness; and personal consolation. In addition to the above, the findings of the study shows that the necessity of regular attendance to hospital; lack of funds to buy additional medicine; and lack of employment are the major mental health needs of people living with HIV.

Conclusion:

Although various issues such as sadness, depression, societal rejection, suicidal thoughts, drunkenness, sleeplessness, inferiority complex and shame negatively affect the mental wellbeing of PLWH, they develop several coping strategies such as: prayer to God and trust in His protection; engaging others to find happiness; and personal consolation to mitigate the effects of these psychosocial factors. NGOs in health and sports programs should, therefore, regularly organize recreational and sporting activities for PLWH so that they can use the opportunity to engage other people and be happy.

Table of Contents

DECLARATION	I
DEDICATION	II
ACKNOWLEDGEMENT	III
ABSTRACT	IV
TABLE OF CONTENTS	VI
LIST OF ABBREVIATION	IX
CHAPTER ONE	1
INTRODUCTION	1
1.1 BACKGROUND OF THE STUDY.....	1
1.2 PROBLEM STATEMENT.....	5
1.3 RESEARCH QUESTIONS	7
1.4.1 General Objective	7
1.4.2 Specific Objectives	7
1.5 SIGNIFICANCE OF THE STUDY.....	7
CHAPTER TWO.....	13
2.0 LITERATURE REVIEW	13
2.1 INTRODUCTION	13
2.2 GLOBAL HUMAN IMMUNODEFICIENCY VIRUS (HIV).....	13
2.3 MENTAL HEALTH AMONG PLWH	14
2.4 PSYCHOSOCIAL FACTORS ASSOCIATED WITH MENTAL HEALTH PROBLEMS IN PLWH.....	16
2.5 COPING STRATEGIES USED TO ADDRESS MENTAL HEALTH PROBLEMS	18
2.6 MENTAL HEALTH NEEDS OF PLWH.....	19
CHAPTER THREE.....	21
METHODOLOGY	21
3.1 INTRODUCTION	21
3.2 STUDY AREA	21
3.3 STUDY DESIGN.....	22
3.4 STUDY POPULATION	22
3.4.1 Inclusion Criteria	23
3.4.2 Exclusion Criteria	23
3.5 SAMPLING TECHNIQUES	23
3.6 DATA COLLECTION TOOLS.....	23
3.7 PRETESTING OF THE TOOLS	23
3.8 DATA COLLECTION TECHNIQUE.....	24
3.11 ETHICAL CONSIDERATIONS	25
3.11.1 Informed Consent	25
3.11.2 Anonymity	25
3.11.3 Confidentiality.....	25
3.11.4 Privacy.....	25
3.11.5 Risks	26
3.11.6 Benefit.....	26

3.11.7 Compensation	26
3.11.8 CONFLICT OF INTEREST	26
CHAPTER FOUR	27
RESULTS.....	27
4.1 INTRODUCTION	27
4.2 DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS.....	27
4.3 ORGANIZATION OF THEMES AND SUB-THEMES.....	31
4.4 PSYCHOSOCIAL FACTORS ASSOCIATED WITH MENTAL HEALTH PROBLEMS AMONGST PEOPLE LIVING WITH HIV	31
4.4.1 Sadness (Depression)	32
4.4.2 Societal Rejection	32
4.4.3 Drunkenness.....	32
4.4.4 Sleeplessness.....	33
4.4.5 Shame.....	33
4.4.6 Inferiority Complex	33
4.4.7 Suicidal Thoughts.....	33
4.5 COPING STRATEGIES USED BY PEOPLE LIVING WITH HIV TO ADDRESS MENTAL HEALTH PROBLEMS AT 37 MILITARY HOSPITAL IN ACCRA.....	34
4.5.1 Praying and Trusting God for His Protection	34
4.5.2 Engaging other people to find happiness	35
4.5.3 Personal Consolation.....	35
4.6 TO IDENTIFY THE MENTAL HEALTH NEEDS OF PEOPLE LIVING WITH HIV AT 37 MILITARY HOSPITAL IN ACCRA.....	35
4.6.1 Regular Attendance to Hospital	36
4.6.2 Lack of funds to buy Additional Medicine	36
4.6.3 Lack of Employment.....	36
CHAPTER FIVE	38
DISCUSSION.....	38
5.1 INTRODUCTION	38
5.2 SOCIO-DEMOGRAPHIC INFORMATION OF RESPONDENTS.....	38
5.3 PSYCHOSOCIAL FACTORS ASSOCIATED WITH MENTAL HEALTH PROBLEMS AMONGST PEOPLE LIVING WITH HIV.....	41
5.4 COPING STRATEGIES USED BY PEOPLE LIVING WITH HIV IN ADDRESSING MENTAL HEALTH	42
5.5 MENTAL HEALTH NEEDS OF PEOPLE LIVING WITH HIV	43
5.6 CHALLENGES ENCOUNTERED DURING THE STUDY	45
CHAPTER SIX	46
CONCLUSION AND RECOMMENDATIONS.....	46
6.1 INTRODUCTION	46
6.2 CONCLUSION	46
6.3 RECOMMENDATIONS.....	46
REFERENCES	49
APPENDICES.....	52
APPENDIX 1 MAIN THEMES AND SUB-THEMES	52
APPENDIX 2 – INTERVIEW GUIDE	53

APPENDIX 3 – PARTICIPANT INFORMATION SHEET 55
APPENDIX 4 - INFORMED CONSENT FORM 57

LIST OF ABBREVIATION

AIDS:	Acquired Immune Deficiency Syndrome
ANC:	Antenatal Care
ART:	Antiretroviral Therapy
HBM:	Health Belief Model
HIV:	Human Immune Virus
LMICs:	Low- and Middle-Income Countries
NGOs:	Non-Governmental Organizations
PLWH:	People Living with HIV/AIDS
SCT:	Social Cognitive Theory
WHO:	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

With no one scope or exact meaning of mental health, the World Health Organization (WHO) defines mental health as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community. It is more than just the absence of mental disorders, but is the foundation for well-being and effective functioning for an individual and for a community (Gutmann, 2009).

Human Immunodeficiency Virus (HIV) is an infection that can lead to AIDS and is a virus that breaks down certain cells of the human immune system that help the body fight infections, making a person more susceptible to or vulnerable to other infections and diseases. It is an epidemic which is characterized as a public health challenge worldwide (Das & Leibowitz, 2010). Globally, the number of people living with HIV is approximately 37.9 million; in Sub-Saharan Africa, there are 25.6 million people; and in Ghana there are approximately 500 thousand people (UNAIDS, 2018). Resolving the mental health problems for people living with HIV (PLWH) is principal to an absolute embark to their care and support. As indicated by Berg et al. (2007), approximated rates of depression among PLWH vary widely and range between 20 percent and 48 percent among PLWH in high-income countries and up to 72 percent in resource-limited countries (Adewuya et al., 2007). Smit et al. (2006) also mentioned that mental illness may also be a challenging factor for HIV infection due to impaired judgment and high-risk behaviors.

A lot of interventions have been put in place to reduce the exposure and prevalence of HIV risk factors globally but millions of people keep getting the virus. Timely diagnosis and treatment of

HIV helps to slow the development of the infection into a deteriorating state, it has been established that, majority of people within the period of 5-10 years of being infected with HIV, manifest signs of HIV-related disorder (WHO, 2016). The World Health Organization (WHO, 2018) has reported that, 23.3 million people living with HIV, representing 62% globally and WHO African Region 64%, were receiving antiretroviral therapy.

HIV is a virus that attacks the immune system, increasing the risk and impact of other infections and diseases. A person can carry the virus without experiencing any symptoms for a long time. However, receiving treatment effectively can prevent HIV from reaching a severe level and reduce the risk of a person passing on the virus. Without treatment, the infection then progress to an advanced disease stage called AIDS.

Albeit the high rate of mental health disorders related to HIV, implications are that mental health states in PLWH are under-diagnosed and incompletely treated (WHO, 2001). One (2009), therefore, mentioned that a radical response is holistically required that focus mainly on constructing systems that will sustain the full range of care, treatment, and prevention services, involving mental health care services, for people living with and affected by HIV (One, 2009).

Antiretroviral therapy has been proven to have the prospective of reducing the progress of HIV virus or infection into Acquire immunodeficiency syndrome (AIDS), however, many people living with HIV do not adhere to the antiretroviral treatment due to some psychosocial factors and some people are also not aware of their HIV status which result in the increase in the viral load (Kalichman et al., 2010; WHO, 2018)

HIV infection have been associated with mental health problems such as depression and anxiety globally. People breakdown psychological immediately they receive HIV diagnosis. The shock upon receiving the diagnosis can turn to fear, guilt, sorrow, helplessness to some extent put suicidal

thought in some people. HIV infection has a strong impact on every aspect of a person's life. (Camellia, 2018).

Notwithstanding the escalating evidence of the mental health needs of PLWH, mental health and behavioral disorders are often condoned and not well-treated. One (2009), for instance, stated that “unseen mental health problems such as depression, cognitive disorders, personality disorders, and co-occurring conditions such as substance-related disorders (substance dependence, substance abuse, intoxication, and withdrawal) can have an extreme effect on adherence, clinic attendance, and quality of life, and can impact the continuous development of disease and high peril attributes that elevate the risks of spreading HIV”. The author continued to state that “given the inherent smack of mental health problems on the overall care and assistance of PLWH, it is essential to be aware of the different mental health requirements at oscillating points in the continuum of care, and to design intercession and support services to sorting those needs” (One, 2009).

According to Ankobil, Siakwa, & Druye (2015), stigma and discrimination are major factors that lead to mental health problems for people living with HIV/AIDS. As explain by the above authors, “health-related stigma and discrimination refers to prejudice, negative attitudes and abuse directed at people living with HIV and AIDS with 35% of countries with available data, having over 50% of people who report at health care centers experiencing discrimination attitudes towards them” (Ankobil, Siakwa, & Druye, 2015). This makes people highly vulnerable to HIV with those most at risk continuing to face stigma and discrimination based on their actual or perceived health status, race, socioeconomic class, age, sex, sexual orientation or gender identity or other forms (Ankobil, Siakwa, & Druye, 2015).

There is a cyclical relationship between stigma and HIV with people who are experiencing these stigma and discrimination being marginalized becoming more susceptible to HIV whilst the

PLWH become more susceptible to experiencing stigma and discrimination with myths and misinformation increasing the stigma and discrimination involving HIV.

Approximately, one out of eight PLWH is usually denied health services due to stigma and discrimination thus, adopting a human rights approach to HIV has become the best strategic interests of public health which has become key to eradicating stigma and discrimination.

Nonetheless, stigma and discrimination manifest itself in a lot of ways. Discrimination and other human rights violation may occur in health care settings, barring of people from accessing health services or enjoying quality health care. Other key affected populations are deserted by their families, peers and the wider community whilst others face poor treatment in educational and work environments, erosion of their rights and psychological effects. All these lead to access limits to HIV testing, treatment and other HIV related care services. HIV stigma has been found to be showing at both the individual and community levels and has negative influence on mental health invoking feeling of shame, guilt, fear and depression (Ankobil, Siakwa, & Druye, 2015)

1.2 Problem Statement

HIV epidemic remains at the core of public health challenges worldwide (Das & Leibowitz, 2010). Specifically in Ghana, the 2017 Ghana AIDS Commission report indicated that Greater Accra region has an estimated population of 73,556 people living with HIV, constituting the highest population of people living with HIV in the country. As it is in other countries where PLWH are stigmatized, the HIV prevalence in Ghana has been found essentially on sentinel surveillance among pregnant women who are attending antenatal care (ANC) across various hospitals. Because of stigmatization, most of these people who discover that they are living with HIV are plunge into various mental health problems. The lack of public education on the need to stop discrimination and stigmatization against people living with HIV/AIDS has also compounded the problem of mental health among the people living with HIV.

According to UNAIDS (2018) “the number of people living with HIV globally were approximately 37.9 million and out of these, 36.2 million were adults and 1.7 million were children (<15 years old)”. In Ghana, adult national HIV prevalence for 2018 was 1.64% with 316,613 people living with HIV and AIDS made up of 289,883 adults (15+ years) and 26,730 children (0-14 years) living with HIV and AIDS (Ali et al., 2019).

Mental health problems are mostly common among people living with HIV globally. It has also been reported that more than half of PLWH exhibit the signs of one or more mental health disorders. The prevalence of mental health problems among people living with HIV have been documented to be very high in the low –and-middle income countries (Parcesepe et al., 2018).

HIV is an extremely stigmatized, discriminated chronic disease with significant co-occurrence of mental health problems. People living with HIV are at higher risk of developing mental health problems compared with the general population. Mental health problems amongst people living

with HIV have a negative impact towards seeking treatment, adherence to treatment and quality of life (Schadé et al., 2013). Basha et al. (2019) explained that, mental health in relation to people living with HIV, is becoming an increasing concern worldwide. However, this persistent issue has been generally ignored in global policy plans. For example, it has become easier for people living with HIV in Ghana to access HIV-related health care since 2004, but their psychiatric and psychological needs are rarely touched (Basha et al., 2019).

In Ghana, limited or little records have been captured on the mental health problems among PLWH. Findings from a study conducted in the Central Region revealed that the development of mental health problems among PLWH is on the higher side with more than 70% recorded (Ankobil et al., 2015).

The psychological burden of the HIV status leads to substance abuse, depression and post-traumatic stress disorder. Social stigma, marginalization and discrimination of people living with HIV (PLWH) lead to further risk and vulnerability that results in physical and mental health deterioration. Das & Leibowitz (2010), for instance, indicated that mental health problems among PLWH has been linked to treatment outcomes and faltering medication compliance underscoring the importance of addressing psychological symptoms.

1.3 Research Questions

1. What are the psychosocial factors associated with mental health problems amongst people living with HIV at 37 Military hospital in Accra?
2. What are the coping strategies used by people living with HIV to address mental health problems at 37 Military hospital in Accra?
3. What are the mental health needs of people living with HIV at 37 military hospital in Accra?

1.4.1 General Objective

The aim of the study is to explore the mental health problems amongst people living with HIV at the 37-military hospital in Accra, Ghana.

1.4.2 Specific Objectives

1. To identify psychosocial factors associated with mental health problems amongst people living with HIV at 37 military hospital in Accra.
2. To explore coping strategies used by people living with HIV to address mental health problems at 37 military hospital in Accra.
3. To identify the mental health needs of people living with HIV at 37 military hospital in Accra.

1.5 Significance of the study

According to the Ghana Health Services Directorate (2014) and Hope for future Generations (2014), efforts to form a support group of people living with HIV has yielded no results. Support groups usually bring together people living with HIV to encourage and support themselves and access treatment and care.

This will help in documenting the level of mental health problems amongst people living with HIV in Accra. The findings of the research may provide basis for policy changes and programmatic interventions to address stigma /discrimination, confidentiality, provision of psychosocial support and mental health service such as counseling and training for HIV providers to fully screen and treat patients for mental health problems. More importantly, this study will add to already existing knowledge about mental health problems and its associated needs and form the basis for further research in the country.

1.6 Conceptual Framework

The conceptual framework is based on the Social Cognitive Theory (SCT) and the Health Belief Model (HBM) to explore the mental health problems among PLWH. This theory provides a framework for understanding, explaining, predicting and changing human behavior (Green & Peil, 2009). The Social cognitive theory adapted from Bandura (1986) suggests that individual behavior is part of an inseparable triadic structure in which behavior, personal factors and environmental factors persistently influence one other. SCT describes the “influence of individual experiences, the actions of others, and environmental factors on individual health behaviors” (Papadopoulou, Abu Shaaban, Gallacher, Taylor, & Williams, 2010). In relation to this, PLWH behavior with regards to mental health can be influenced by the actions of others, their environment and personal experiences.

The Health Belief Model (HBM) developed by Hochbaum, Rosenstock and Kegels (1950) is a model used in understanding health-related behavior and adherence to health intervention. HBM is extensively use to predict health behavior and promote the acceptance of health services.

HBM has been adapted in numerous studies to understand health behavior in sexual risk behaviors and HIV/AIDS transmission. According to Rosenstock (1974), “an individual will take preventive action if they believe that action will prevent illness and if they have the desire to avoid that illness” (Koenker et al., 2013, p2.). In this instance, HBM explains how PLWH deal with mental health problems. Mental health problems are conditions that are caused by multifactorial factors. HBM gives explanation on how people/individuals who adopt HIV intervention (ARTs) and adherence contribute to mental health problems.

In this conceptual framework, socio-demographic characteristics such as “socio-economic status, gender, ethnicity, and age are associated with preventive health-related behavior patterns associated with mental health problems (i.e. patterns of behavior predictive of differences in

morbidity and mortality) as well as differential use of health services” (Abraham & Sheeran, 2014). These socio demographic factors contribute to the psychosocial conditions of PLWH, example, among individuals within 18-60 years, dealing with ART adherence, causes mental stress and anxiety upon which when accumulated can lead to chronic mental health problems like depression, adjustment disorder among others. Family size is a major contributor to mental health stability or failure among PLWH, it is noted that individuals that receive moral support adapt well to the new status thus maintaining their mental health wellness (Nabavi, 2016). Society and individual factors contribute immensely to the coping strategies adopted by patients under the ART therapy. According to Jonsson et al. (2013) coping strategies surrounding the patients are core to maintaining and even improving the general outlook on life, example having religion and prayer as a background factor could improve a victims mental state and coping strategies. These coping strategies have an interdependent relationship with psychosocial conditions. In the sense that HIV individuals with better coping strategies have a relatively stable mental health compared to those who do not. On the other hand, psychosocial factors such as stigma, discrimination etc could instigate a response towards improving already existing or failing coping strategies. It cannot be denied that part of the mental health needs/problems are as a result of socio-demographic factors where for example a patients’ age could make them more susceptible to mental health problems as a result of stigma or isolation (Adewuya et al., 2008). This has been proven among ageing population as the family network dwindles the risk of adverse mental issues increases and as such there is need for coping to manage the risk and reduce the effects of existing mental health issues resulting from the effect of HIV positive status.

A combination of understanding psychosocial factors, coping strategies and mental health needs are essential to improving mental health problems. By having policies and health systems that

accommodate mental health needs for HIV patients, and train extensively people infected and affected could contribute to the general coping strategies and improvement of mental health outcome for PLWH.

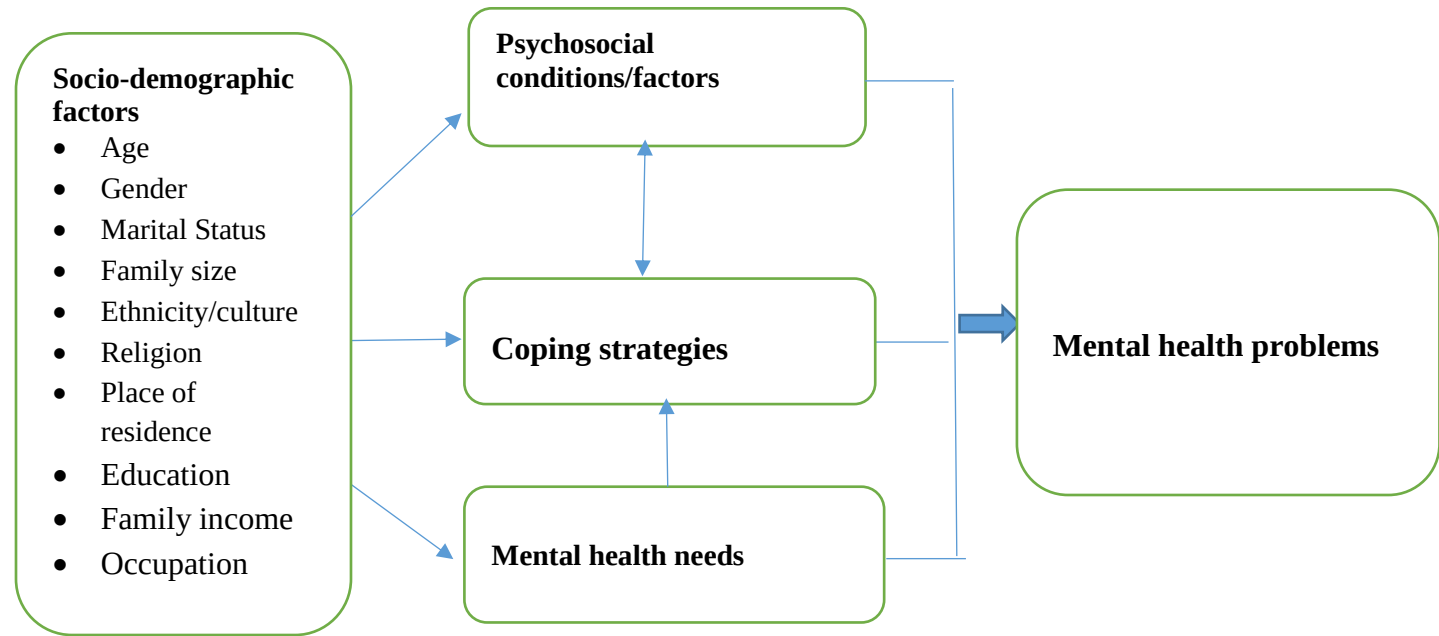


FIGURE1: CONCEPTUAL FRAMEWORK FOR MENTAL HEALTH PROBLEMS AMONG PLWH (ADAPTED FROM SCHMIDT, 2013)

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This section presents the various studies that have been carried out in the area of mental health among PLWH. It will look at the history of HIV, the situation in the global context, in Africa and Ghana, factors influencing mental health, coping strategies, mental health needs and the Antiretroviral therapy.

2.2 Global Human Immunodeficiency Virus (HIV)

The human immunodeficiency virus (HIV) epidemic was first discovered in the 1980s. Over 78 million people have been infected with the virus globally and more than 39 million people have died with AIDS-associated causes. “Sub-Saharan Africa is the most affected region, with 25.6 million people representing 70% are living with HIV, which accounts for two-thirds of the global total of new HIV infections” (UNAIDS 2018).

The prevalence of HIV varies from country to country, however, the majority of the cases come from low and middle-income countries including Africa (WHO, 2016). The number of HIV infected people during 2016 in sub-Sahara Africa was 25.5 million as compared to 6.7 million in Asia and 4.2 million in Europe and America (WHO, 2016). HIV/AIDS affects people of all ages and sex.

Currently in Ghana, the prevalence of people living with HIV is 1.68% (Ghana AIDS Commission, 2018). The World Health Organization (WHO) reported in December 2018 that, 23.3 million people living with HIV representing 62% globally and WHO African Region representing 64% were receiving antiretroviral therapy.

The “healthcare and management of such a huge number of PLWH is a realistic challenge for Ghana health service providers and policy makers, predominantly because this number continues to grow” (Ghana AIDS Commission, 2018).

PLWH are at a higher risk of developing mental health problems, which has a negative impact on the treatment of the infection. Mental health problems in PLWH affect public health. Schadé, Van Grootheest, & Smit (2013), for instance, psychopathology such as depression and substance abuse increase risky sexual behavior and a higher chance of spreading the virus

As stated by Patel et al. (2018), “HIV intervention programmes since 2004 have been established in over 30 low and middle income countries (LMICs) globally with approximately 19.5 million people living with HIV (PLWH) receiving antiretroviral treatment (ART) in 2016”. As the acceptance of ART increases in LMICs, PLWH are more likely to improve their survival rate since the treatment will suppress the development of the viral into AIDS. As the HIV related illness decreases, HIV related mental disorders also increases (Patel et al., 2018).

2.3 Mental Health among PLWH

According to Basha, Derseh, Haile, & Tafere (2019), “mental health problem (or psychological distress) is a term used to describe a range of symptoms and experiences of a person’s internal life that are commonly held to be troubling, confusing, or out of the ordinary”.

Basha et al. (2019) continue to explain that, “mental health in relation to people living with HIV, is becoming an increasing concern worldwide. However, this persistent issue has been generally ignored in global policy plans”. Since 2004, it has become easier for people living with HIV in Ghana to access HIV-related health care but their psychiatric and psychological needs are rarely touched. As pointed out by Niu, Luo, Liu, Silenzio, & Xiao (2014), “HIV infection is considered as a traumatic and stressful experience that can negatively affect mental health status and potentially lead people into a cycle of physical and mental deterioration”. According to Niu et al.

(2014), “studies have shown that people living with HIV are more likely than the general population to exhibit mental health problems which includes depression, anxiety and suicidality, as well as the harmful use of substances” (Niu, Luo, Liu, Silenzio, & Xiao, 2014).

Chibanda, Benjamin, Weiss, & Abas, (2014) also stated that “many mental problems are more predominant among people living with HIV (PLWH) than among those who are not HIV-infected, adding to disability and poor quality of life”. According to these authors, “numerous mental health problems also directly or indirectly increase the risk of HIV treatment failure, and also increase the spread of the virus” (Chibanda, Benjamin, Weiss, & Abas, 2014).

Similarly, Brandt (2009) also mentioned that “studies have shown numerous links between HIV and mental health, including higher levels of mental disorders among people living with HIV”. However, “research from developing countries remains limited” (Brandt, 2009).

According to Chorwe-Sungani, Sefasi, & Pindani (2015), their study, which was conducted among PLWH who were attending Antiretroviral Therapy (ART) clinics in Mzuzu “found 14.4% as a prevalence rate of psychological distress among these people”. The authors explained that “related studies have also shown that almost half of the people who have HIV and AIDS in Africa suffer some form of mental disorder, commonly depression and anxiety” (Chorwe-Sungani, Sefasi, & Pindani, 2015).

According to Chibanda et al. (2014), “depression is the most common psychiatric disorder found among PLWH in LMICs”. As indicated by the authors, depression poorly impacts the lives and wellbeing of PLWH and their families but remains largely undiagnosed because limited HIV care settings carry out routine screening. “Depression is defined by diagnostic (*Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders [DSM-V]*; *International Classification of Diseases, Tenth Edition*) or screening criteria based on the number and severity of symptoms or

behaviors, such as sadness, loss of interest, lack of pleasure, poor sleep, concentration, loss of appetite, impaired social and work roles” (Chibanda et al., 2014). Depression is, therefore, a serious mental disorder which is twice as common in PLWH as in the general population.

Depression in PLWH is also as a result of antiretroviral treatment. Mental health facilities remains underfunded, understaffed and underutilized in both developed and developing countries despite the increasing burden of mental health problems (Ankobil, Siakwa, & Druye, 2015).

2.4 Psychosocial factors associated with mental health problems in PLWH

According to Brandt (2009), “research from Africa shows several psychosocial and health-related factors that are associated with mental health problems in PLWH”. Also, “certain socio-demographic factors are associated with greater psychiatric illness and may therefore point to those persons within the settings of African who are at greater risk of poor mental health” (Brandt, 2009). Since HIV is a discriminating disease, “people living with it are most often affected with lack of social support, poor self- esteem, stigma, and discrimination. This, however, predisposes them to psychological problems such as depression and anxiety” (Basha et al., 2019).

There are little discernment on the connections between the epidemics of HIV infection and mental illness in sub-Saharan Africa. Research from Europe and North America has shown that HIV may affect the mental health of infected people in different ways over time. At the early state of the HIV disease, the psychosocial impact of an HIV diagnosis, often presents a substantial stressor that may trigger an increase in the prevalence of mental health problems. Regardless of the importance of HIV and mental problems among people living with HIV, in shaping population health, only a few studies have been conducted to examine mental health problems among HIV infected individuals in sub-Saharan Africa (Myer et al., 2008).

Despite care and treatment improvements that have turned HIV into a chronic and manageable situation, PLWH continue to suffer from stigma and discrimination from their family and societies.

HIV associated stigma and discrimination obstruct millions of PLWH from accessing and profiting from effective prevention and treatment services. As a result, about 50–60% of PLWH are not aware of their sero-status, and many decide to hide it. Additionally, “HIV-related stigma and discrimination have been found to be associated with delays in seeking care and possible barriers to HIV counseling and testing, disclosure of HIV sero-status, retention in care and treatment, and adherence to antiretroviral therapy” (Yi et al., 2015).

Stigma and discrimination occurs in different ways. Discrimination and other human rights abuse may occur in health care settings, preventing people from getting access to health services or enjoying quality health care. Some PLWH are rejected by family, peers and the community, whereas others face poor treatment in work, educational and governmental settings, and psychological impairment. All these contribute to limit access to HIV testing, treatment and other HIV services. Findings from over 50 countries, estimated approximately one in every eight PLWH are being deprived of health services as a result of stigma and discrimination. Self-stigma or internalized stigma, has an equal negative impact on the mental health of PLWH. The fear of stigmatization and discrimination kills the confidence of PLWH to seek for help and medical care. Negative self-judgment that result in the feeling of shame, worthlessness and blame signifies an essential but neglected characteristic of living with HIV. Self-stigma affects a person's capacity to live a positive and meaningful life, adhere to treatment and access to health services (HIV Stigma and Discrimination, 2015).

2.5 Coping strategies used to address mental health problems

Mental health care has been factored into HIV programs in developed countries for many years as a result of significant proof of associations between mental health and HIV. Studies conducted in North America and Europe suggested that “PLWH often suffer from depression and anxiety problems as they adjust to the diagnosis, get used to life with a chronic life-threatening illness, anticipate and receive news of the disease’s advance, and witness the death of their friends and family” (Collins, Holman, Freeman, & Patel, 2006).

Mental health problems associated with HIV have a key influence on willingness of providers to initiate ART and on ensuing treatment adherence and outcome. Reported rates of alcohol abuse among PLWH as a way of dealing with the problem in Africa differ significantly, with the highest rate of 72 percent recorded in Uganda (Gutmann, 2009).

Mental health problems weaken judgment, ease fear of consequences, and escalate vulnerability to outside influences. As a result, people with untreated mental health problems are at a higher risk for involving in behaviors that further spread the virus. In 2002 a cross-section study conducted on young HIV positive population in St. Petersburg in Russia revealed that, these young people have histories of drug use and risky sexual behavior as means for coping with the problem. In spite of knowing their status, “most remained sexually active,” “approximately half engaged in unprotected sex with HIV negative partners” and “the majority of those who used drugs still shared needles”(Baingana, Thomas, & Comblain, 2005).

2.6 Mental Health Needs of PLWH

According to Parcesepe et al (2018), “no attention has been paid to identifying and addressing the mental health needs of PLWH in Sub-Saharan Africa, which accounts for more than 70% of global burden of HIV”. Mental health is, however, “central to building a healthy, inclusive and productive society, according to the World Health Organization” (WHO 2005a). The WHO also “regards HIV/AIDS as the most demanding public health and social challenge of the last 25 years” (WHO 2005b). Surprisingly, “the association between these two subjects is hardly made in the minds of the public, policy-makers and health professionals, and mental health issues are often ignored in programs for HIV prevention and care” (Parcesepe et al., 2018). Yet mental disorder is “inseparably linked with HIV, as a fundamental factor and as a consequence, while mental health treatment and support for PLWH is the basic key to both improving their quality of life and preventing the advance spread of the virus” (Parcesepe et al., 2018). According to Schneider (2004), support groups have a lot of advantages, which includes, “providing a sense of belonging, and facilitate and enable the expression and sharing of feelings which contributes to better mental health”. Support groups also help to relieve anxiety by providing a common emotional support among members. They give education to PLWH on living with HIV and AIDS and its associated problems. Support groups produce a sense of empowerment, hope and confidence to members. Social groups function on the basis that people need one another to survive in the world both physically and emotionally. “Support groups are perfect for handling the effects of stigma, discrimination, isolation, loneliness and other consequences of being HIV positive” (Ramlagan, Peltzer, Phaswana-Mafuya, & Aquilera, 2010).

Problems may arise at each phase of HIV infection, for example during testing, receiving a HIV-positive diagnosis, the symptomatic phase, starting antiretroviral treatment and the terminal care

phase. Therefore, it is important for PLWH to have easy access to mental health facilities to help improve and promote their health and well-being, and to prevent the spread of the virus.

According to Wang et al. (2007, p. 847) “disturbingly high levels of unmet need for mental health treatment worldwide, even for people with the most serious disorders”. There are undeniably worse consequences in less developed countries where only a few people with serious disorders receive any form of attention. Even in developed countries, “approximately 50% of individuals with serious mental illness do not receive sufficient treatment. In the LMIC, mental health problems accounts for more than 11% of the disease burden, but many countries invest less than 1% of the health budget to mental health services among PLWH” (Das & Leibowitz, 2010).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section describes the research methodology that was used to conduct this study. It includes, study area, design of the study, population, techniques for collecting and managing data as well as ethical considerations.

3.2 Study Area

This study was situated at 37 Military Hospital, which is a referral health facility. The 37 Military Hospital is located in the South-Eastern part of Accra on the main road between Kotoka International Airport and central Accra (Ghana News Agency, 2016). The “hospital is located close to the Jubilee House, the seat of government at the intersection of the Liberation road and Giffard Road. The 37 Military Hospital is a 500-bed capacity and an extended capacity of 600 beds in emergency situations, an estimated annual Outpatient attendance of about 26486 visits, an annual Inpatient attendance of about 13208. About 85% of the annual attendance is from the general public- It serves as the government’s emergency response health facility and as a United Nation’s level IV medical facility in the West African sub-region” (Ghana News Agency, 2016). The hospital has a mixed staff of both military and civilians. “The hospital even though its core mandate was to provide health care to soldiers and their dependents, it has over the years diversified to providing health care services to the general public” (Ghana News Agency, 2016). The hospital has 14 outpatient departments and 10 in-patient departments (wards and emergencies). It also has an estimated staff capacity of about 3500 comprising both military and civilian employees. The hospital has about 10 departments which includes; Accident and Emergency, Public Health Division, Medical Division, Obstetrics and Gynecology among others. The Public Health Division of the 37 Military Hospital runs an HIV/AIDS Clinic for patients providing quality prevention and care services. The Division also collaborates with institutions and agencies such as the Ghana

AIDS Commission, Johns Hopkins University, Ghana Health Service to roll out programmes and projects on HIV/AIDS.



FIGURE 0-1 LOCATION OF 37 MILITARY HOSPITAL IN ACCRA

Source: Google Map: <https://www.google.com/maps/place/37+Military+Hospital/>

3.3 Study Design

A qualitative research method was used to explore the mental health problems experienced amongst people living with HIV at the 37-military hospital in Accra. Qualitative research methods are often concerned with gathering comprehensive understanding of a phenomenon (and heterogeneities in meaning).

3.4 Study Population

The study population consisted of people living with HIV at the 37 Military hospital. It included both males and females between 18 to 60 years because they are sexually active and are prone to exposure to HIV and thus making up the larger percentage of the HIV population. Over 10, 000 people constituted the study population at the 37 Military hospital.

3.4.1 Inclusion Criteria

People living with HIV receiving ARTs from the hospital. Males and females between the ages of 18-60 years who were living with the condition for over one year were eligible to take part in the study.

3.4.2 Exclusion Criteria

People with HIV but do not have records for taking ARTs as well as ARVs at the hospital were excluded. Also, people under 18 years old who are living with HIV were excluded. Finally, those who have been living with HIV for short periods (under one year) were excluded.

3.5 Sampling Techniques

A purposive sampling technique was employed to purposively select people living with HIV receiving ARTs from the hospital. The recruitment was done with the assistance of nurses and Physicians in charge of the HIV care unit until saturation. The 37 Military hospital is selected for this study because it is the health facility with an established counselling unit for people living with HIV/AIDS that is closer to the researcher.

3.6 Data Collection Tools

A semi-structured interview guide based on the World Health Organization (WHO) and USAID standardized tool for measuring mental health problem was used. This was modified to obtain information about knowledge on the social and personal factors and its related mental health problems, notebooks, audio recorder and stationery were used. English language, Twi and Ewe was used for the data collection since all the respondents could not speak the English language.

3.7 Pretesting of the tools

The tools for the research were pretested at the Legon hospital to ensure the questions were clear for respondents. Pretesting the questions helped to find out if there were any need to make modification and correction. To ensure that the questions were well understood by participants in order to effectively improve them to increase response rate of the participants.

3.8 Data Collection Technique

A structured interview guide based on the World Health Organization (WHO) and USAID standardized tool for measuring mental health problem was modified to obtain information about knowledge on the social and personal factors and its related mental health problems, coping strategies and the mental health needs of people living with HIV. The interview guide covered questions on demographics such as age, sex, educational level among others. A non-probability sampling method was used to select samples for this study. The selection of participants for this study was guided by purposive sampling technique. This technique is suitable for the study because it relied on the judgments of the researcher with regards to the selection of participants.

In-depth interviews (IDIs) were conducted with selected PLWH between the ages of 18-60. An interview session lasted for about 20 minutes which was audio recorded and notes. In addition to the researcher, two nurses assisted in the collection of data in the hospital. The interviews were terminated after a point of saturation was attained. The point of saturation was attained after interviewing the 17th respondent.

3.9 Data security

Data collected on audio recorder was password protected and access to it was limited to the Principal investigator and the Supervisor. Hard copies were stored in locked cabinets.

3.10 Method of Analysis

The interviews were recorded electronically. The researcher, in adherence to ethics of social research, sought the prior consent of the respondents before the electronic record. The recorded data was transcribed verbatim and categorized into major themes that were based on the research questions. Related themes generated from the coded interview transcripts were analyzed in line with the research objectives using thematic analysis.

3.11 Ethical Considerations

Ethical approval was sought from the 37 military hospital Research Ethics Committee (37MH-IRB/MAST/IPN/397/20) and also permission from the hospital's administrator (Commanding officer).

3.11.1 Informed Consent

The nature, purpose and risk of the study was explained to participants. The voluntary consent was obtained by endorsing a written consent form. All the participants including those who could read and those who could not read appended their signature by themselves. Copies of the participant information form and consent forms were given to participants for their personal record keeping and the Research team also kept one before commencing the interview.

3.11.2 Anonymity

Information collected were not linked to any participant in order to protect their identities. Participants were coded by assigning unique identifiers with no names attached to ensure anonymity of participants.

3.11.3 Confidentiality

Participants were assured of confidentiality before the interview began. Interviewer told participants that all the information were confidential and was going to be used solely for research purpose and the findings will help to improve health care they receive.

3.11.4 Privacy

The information and data collected from participants were not revealed to anyone except the study team and the IRB. Information on computers was password protected. Privacy was assured by interviewing respondent at a convenient place to avoid interruption and other people listening on the conversation.

3.11.5 Risks

Some participants experienced emotional distressed during the interviews. Respondents were asked if they would like to discontinue the interview but they said it was helpful talking about it. So, some emotional relief exercises were done and participants were recommended to the psychologist immediately after the interview. Participants were informed through the participants inform consent form before they participated in the study.

3.11.6 Benefit

There were no direct benefit for taking part in this study. Results of the study added to the knowledge about the mental health problems people living with HIV attending the 37 Military Hospital experience. This will consequently lead to improved healthcare systems, service delivery and awareness on mental health issues for people living with HIV.

3.11.7 Compensation

There was no compensation for participating in the study and study participants were duly informed before they choose to take part in the study.

3.11.8 Conflict of interest

There was no conflict of interest in conducting this study.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents results on the mental health problems amongst people living with HIV at the 37-military hospital in Accra, Ghana. Specifically, the chapter is organized under three main themes which include: psychosocial factors associated with mental health problems amongst people living with HIV; coping strategies used by people living with HIV to address mental health problems; and the mental health needs of people living with HIV at 37 military hospital in Accra. Sub-themes were generated under each of the above major themes based on the data from participants. All major themes and sub-themes are supported with verbatim quotations and assertions from participants. Prior to the presentation of results under the major themes, the demographic information of participants is presented.

4.2 Demographic Characteristics of Participants

Demographic characteristics describe the profile of the study participants. The specific characteristics obtained from participants included age, gender, highest level of education attained, marital status, religion and occupation. In all, a total of seventeen (17) participants were interviewed for the study. Pseudonym (anonymous names) were giving to each of the participants for easy identification. The first participant is represented with the pseudonym (P001); where the ‘P’ represent participant. The second participant is represented with (P002); the third participant with (P003); the fourth participant with (P004); the fifth participant with (P005); the sixth participant with (P006); the 7th participant with (P007); the eighth participant with (P008); the ninth participant with (P009); the tenth participant with (P010); the 11th participant with (P011); the twelve participant with (P012); the 13th participant with (P013); the fourteenth participant with

(P014); the fifteenth participant with (P015); the sixteenth participant with (P016); and the seventeenth participant with (P017).

Whereas 12 of the participants were females, only 5 of them were males. Out of the 17 participants, those who are within the age bracket of 20-30 are four (4), those within the age bracket of 31 – 40 are only three (3) whereas those within the age bracket of 41 to 50 are eight (8). Only one of the participants (P007) is between the ages of 51 - 60. This show that majority of the participants are predominantly youthful.

With regards to their level of education, those who attained JHS education were ten (10) whiles those without any formal education were two (2). The rest of the five (5) participants respectively attained post graduate (Masters) education; HND education; O level education; Vocational training; and Primary education. This shows that most of the participants are educated. Majority of them however had basic education compared those who attained tertiary education. Whiles eleven (11) of the respondents are currently married, four (4) of them never married and one (1) of them is a widow. One of the participants was also divorced by the wife after realizing that he contracted HIV. This is an indication that, most of the participants are still married to their spouse even with the HIV.

With regards to religious association of participants, majority of them, constituting eleven (11), indicated that they are Christians whereas the second majority were Muslims, constituting five (5) of the participants. Only one (1) of the participant indicated that he is a traditionalist.

Finally on the demographic characteristics of the participants, their occupation ranges between businessmen and women and hairdressing with three (3) of them being unemployed. The

occupation of the participants signify that they all work in the informal sector of the Ghanaian economy. The demographic data of the participants are summarised in Table 1.

Table 1: Participants' Demographic Data

pseudonym	Gender	Age	Highest level of Education	Marital Status	Religion	Occupation
P001	Female	29	JHS	Married	Islam	Hairdresser
P002	Male	44	JSH	Divorced	Islam	Businessman
P003	Male	49	JHS	Married	Christian	Unemployed
P004	Female	27	Masters	Married	Christian	Unemployed
P005	Female	46	JHS	Married	Christian	Unemployed
P006	Female	28	JHS	Married	Christian	Salesperson
P007	Female	57	JHS	Unmarried	Christian	Caterer
P008	Female	34	HND	Married	Christian	Caterer
P009	Male	45	O Level	Unmarried	Traditionalist	Taxi Driver
P010	Female	45	No formal Education	Married	Christian	Business Woman
P011	Male	42	JHS	Married	Muslim	Businessman
P012	Male	30	JHS	Unmarried	Christian	House Attendant

P013	Female	37	No formal Education	Married	Muslim	Trader
P014	Female	49	SHS	Married	Muslim	Trader
P015	Female	49	JHS	Widowed	Christian	Businesswoman
P016	Female	22	JHS	Unmarried	Christian	Salesperson
P017	Female	36	Primary	Married	Christian	Hairdresser

Table 1.1 Gender of Participants

Gender	Frequencies	Percentages
Male	5	39%
Female	12	61%
Total	17	100%

Table 1.2 Education Level of Participants

Education Level	Frequencies	Percentages
No Formal Education	2	12%
Primary Education	1	5.8%
JHS Education	10	59%
Vocational training	1	5.8%
O Level	1	5.8%
HND	1	5.8%
Master's Degree	1	5.8%
Total	17	100%

Table 1.3 Marital Status of Participants

Marital Status	Frequencies	Percentages
Never Married	4	24%
Married	11	65%
Divorced	1	5.8%
Widowed	1	5.8%
Total	17	100%

Table 1.4 Religious Affiliation of Participants

Religion	Frequencies	Percentages
Christians	11	65%
Muslims	5	29%
Traditionalist	1	6%
Total	17	100%

Table 1.5 Occupation of Participants

Occupation	Frequencies	Percentages
Unemployed	3	18%
Hairdressers	2	12%
Businessman / Woman	12	70%
Total	17	100%

4.3 Organization of Themes and Sub-themes

In all, total of (11) sub-themes were generated under the three specific objectives of the study.

Whiles the main themes were developed based on the objectives of the study, the sub-themes were generated out of codes that were developed from the data gathered from the participants. The three specific objectives are (1) psychosocial factors associated with mental health problems amongst people living with HIV; (2) coping strategies used by people living with HIV to address mental health problems; and (3) the mental health needs of people living with HIV at 37 military hospital in Accra. Details of the main themes and their corresponding sub-themes are presented in appendix I.

4.4 Psychosocial factors associated with mental health problems amongst people living with HIV

The first objective of this study is to find out the psychosocial factors associated with mental health problems amongst people living with HIV. Participants were therefore asked probing questions in order to elicit their responses on the emotional and social challenges that they go through as result of HIV infection. From the data gathered from participants, in response to the above question, seven (7) main sub-themes emerged. These include: sadness (depression); societal rejection;

suicidal thoughts; drunkenness; sleeplessness; inferiority complex; and shame. The responses of participants under each of these sub-themes are analysed as follows.

4.4.1 Sadness (Depression)

With regards to sadness (depression), participants indicated that when they remember that they are HIV positive, the thought of the virus makes them very depress. Consequently, this make them to be very sad. One of the participants for instance indicated that,

“I sometimes feel very sad when I remember that I have a sickness that have no cure” (P001, Female, 29yrs).

Another participant also share similar assertion by indicating that,

*“.....when I realized it I got worried and I was distress as well”.
(P003, Male, 49yrs).*

4.4.2 Societal Rejection

Some participants also indicated that, they were rejected by close relatives, friends and even spouses who got to know that they were living with the virus. A male participant for instance indicated that,

“I have really gone through a lot because I never expected my wife to leave at that moment. I have been with her for a long time before this disease” (P002, Male, 44yrs).

4.4.3 Drunkenness

As indicated by participants, another psychosocial factor associated with people living with HIV is the desire to resort to drinking excessive of alcohol in order to prevent them from thinking about the diseases. One of the participants for instance indicated that,

“..... it was first when I discovered that I was infected with the virus that I started drinking alcohol to help me stop thinking about the virus. But with counseling advice from the doctors, I stopped drinking alcohol” (P006, Female, 46yrs).

4.4.4 Sleeplessness

Some participants also indicated that as a result of worry and depression that are associated with the virus, they were sleepless especially when they first knew that they had the disease. A female participant for instance posits that,

“..... I couldn't sleep for 3 days, I was worried and thinking what could be the cause” (P008, Female, 28yrs).

4.4.5 Shame

Another major psychosocial factor associated with people living with HIV is the shame and embarrassment that they have to fight with as a result of societal perceptions and views. A female respondent comprehensively captured this assertion by indicating that,

“truthfully I can't say it was because I was moving from one man to the other, that's not true and till now I still feel the pain and that is why when I come to the hospital I feel shameful”. (P005, Female, 46yrs).

4.4.6 Inferiority Complex

Closely related to the above, the responses of participants indicated that the participants also lack confidence and usually suffer from inferiority complex. The fifth participant interviewed (P5) for instance stated that,

“.....even when no one knew, I couldn't mingle with people because in my mind, I feel if I mingle with people, I will be rejected” (P005, Female, 46yrs).

4.4.7 Suicidal Thoughts

Finally on psychosocial factors, some of the respondents also indicated that as a result of factors such as: societal rejection, social stigma and depression that is associated with the disease as well as discrimination against people living with HIV, they attempted to take their own life. In line with suicidal thoughts, one of the participants, for instance, voiced out that,

“.....I really wanted to kill myself if not for the doctor's advice and my mum told me not to do it” (P002, Male, 44yrs).

The results from the data gathered on the first objective, as analyzed above, revealed that several psychosocial factors are associated with mental health problems amongst people living with HIV. Specifically for people living with HIV at 37 Military Hospital, the dominant psychosocial factors that is associated with their mental health problems include: sadness (depression); societal rejection; suicidal thoughts; drunkenness; sleeplessness; inferiority complex; and shame. The results presented above therefore answers the first research question and also address the first objective of the study which seeks to identify psychosocial factors associated with mental health problems amongst people living with HIV at 37 military hospital in Accra.

4.5 Coping Strategies Used by People Living with HIV to Address Mental Health Problems at 37 Military Hospital in Accra.

The second objective that this thesis seeks to explore is to examine the coping strategies used by people living with HIV to address mental health problems at 37 military hospital in Accra. Participants of the study were therefore asked to varied questions in line with this objective. From the data gathered from participants, three sub-themes emerged. These include: praying and trusting God for His protection; engaging others to find happiness; and personal consolation. The specific responses of participants under each of these sub-themes are analysed as follows.

4.5.1 Praying and Trusting God for His Protection

Some of the participants indicated that they cope with their mental health problems primarily by praying and trusting that God will protect them. Those who share this assertion are of the view of that because they know that there is no medicine that can cure the disease, they look up to God to protect them as they continue to take the medicine which is expected to help them live longer. A female respondent for instance indicated that,

“.....it will make me worried for the whole day but I don’t do anything; I only look up God and I always pray for his protection”
(P006, Female, 46yrs).

4.5.2 Engaging other people to find happiness

Other respondents indicated that, in order not to be rejected by the society, they keep their HIV status secret from their friends and relatives. This is mainly because, they reach out to these same people when they become lonely. Disclosing their HIV status to these friends and relatives will lead to discrimination against them. Particularly, some participants who have their biological children, engage these children to be a source of happiness for them. The first participant interviewed for instance indicated that,

“.....I go out to get my baby with me so he can always make me happy” (P001, Female, 29yrs).

4.5.3 Personal Consolation

Finally on coping strategies, some respondents indicated that, they personally accept that HIV is just like any other common sickness on earth. They therefore console themselves to remain strong and live happily. A male participant succinctly indicated that,

“I took it as a normal sickness and it does not bother me because I know some people with HIV for 10 years and they are still there” (P009, Male, 45yrs).

The responses above shows that participants use prayer to God and trust in His protection; engagement of other people for happiness; and personal consolation as coping strategies to address their mental health problems. This therefore answers the second research question and address the second objective which seeks to explore coping strategies used by people living with HIV to address mental health problems at 37 military hospital in Accra.

4.6 The need for provision of counselling services for people living with HIV at 37 military hospital in Accra.

The third objective of this thesis seeks to identify the mental health needs of people living with HIV at 37 military hospital in Accra. Participants of the study were therefore asked various

questions in line with the third objective. From the data gathered from participants, three sub-themes emerged. These include: necessity of regular attendance to hospital; lack of funds to buy additional medicine; and lack of employment.

4.6.1 Regular Attendance to Hospital

Some of the respondents complained about the need for them to report to the hospital every three months for medicine that are given them to help them contain the virus. They prefer to be given the medicine in abundance so they come to the hospital once a year. A female respondent for instance indicated that,

“Sometimes, when you come here [the hospital], you will stay here very long and you will be feeling down on yourself to. But every three month you must come. I prefer they give us the medicine in abundance so we come once a year” (P016, Female, 22yrs).

4.6.2 Lack of funds to buy Additional Medicine

Some of the participants also indicated that it was recommended to them to buy additional medicines. But they do not have the money to purchase such medicines. A female participant for instance commented that,

“..... my father is very old and I’m the only one looking after him so some of the lab tests I’ve not done them;.....even though the lab test is very necessary to know what’s happening in your body, I don’t have money to do them yet (P005, Female, 46).

4.6.3 Lack of Employment

Finally, some of the participants indicated they do not have a source of employment and this affect their standard of living and daily upkeep. This assertion was captured in the viewpoint of a female participant who indicated that,

“.....as for me what I want is the job, now all my relatives in Accra don’t want to associate with me so I don’t even contact them” (P007, Female, 57yrs).

The responses above shows that the necessity of regular attendance to hospital; lack of funds to buy additional medicine; and lack of employment are the major mental health needs of people living with HIV at 37 military hospital in Accra. This therefore answers the third research question and address the third objective which seeks to identify the mental health needs of people living with HIV at 37 military hospital in Accra.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

The general aim of this study was to explore the mental health problems amongst people living with HIV at the 37 military hospital in Accra, Ghana. Specifically, the study was guided by three main objectives which seeks to: identify psychosocial factors associated with mental health problems amongst people living with HIV at 37 military hospital; explore coping strategies used by people living with HIV to address mental health problems at 37 military hospital; and identify the mental health needs of people living with HIV at 37 military hospital in Accra. This chapter discusses the results of the study based on the objectives of the study.

5.2 Socio-Demographic Information of Respondents

Whereas 12 of the participants were females, only 5 of them were males. This means that in 37 military hospital, more females have been diagnosed with HIV compared to their male counterparts. This confirms the assertion of Asiedu & Myers-Bowman (2014) who indicated that across the globe; and specifically in Ghana, more women have been diagnosed with HIV/AIDS and are more likely to be stigmatized compared to men.

With regards to the age of respondents, out of the 17 participants, those who are within the age bracket of 20-30 are four (4), those within the age bracket of 31 – 40 are only three (3) whereas those within the age bracket of 41 to 50 are eight (8). Only one of the participant was between the ages of 51 - 60. This show that majority of the participants are predominantly youthful. This is in line with the finding of the Ghana AIDS Commission who indicated that in 2019 alone, the total number of people who were infected with HIV in Ghana were 20,068 people, made up of 17,096 (85%) adults (15 years and above) and 2,972(15%) children (14 years and below); and out of the

adults that were infected with HIV in 2019, 5,613 (28%) were youth (15 – 24 years), made up of 4,409 (79%) females and 1,205 (21%) males (Ghana AIDS Commission, 2020).

Concerning the education of participants, arguably, the level of education a person attained is considered as an importance protective factor against HIV infection. It is therefore perceive that people who attained higher level of education “are less likely to have HIV infection compared with those with none/basic education” (Harling & Bärnighausen, 2016). One of the major participants’ demographic characteristic investigated by this dissertation is their level of education. The study found that those who attained JHS education were ten (10) whiles those without any formal education were two (2). The rest of the five (5) participants respectively attained post graduate (Masters) education; HND education; O level education; Vocational training; and Primary education. This means that although most of the participants are educated, majority of them (13 of them) are in the category of those who had basic education and no education (JHS, Primary and No formal education). Only 2 of the participants attained tertiary education (HND and Masters Education).

According to Pettifor et al. (2008) who conducted a similar study in South Africa, “young women who had not completed high school were more likely to be infected with HIV compared with those that had completed high school”. Similarly, Orish, Onyeabor, Boampong, Afoakwah, Nwaefuna Acquah & Iriemenam (2014) conducted a similar study in the Sekondi-Takoradi metropolis of Ghana and found out that their data “showed an association with higher level of education and HIV statuses of the pregnant women”. Specifically, Orish et al. (2014) found out that “pregnant women with secondary/tertiary education were less likely to have HIV infection compared with those with none/primary education”. The authors therefore concluded that, “it is very imperative

to encourage formal education among pregnant women in the Western region so as to reduce the rate of HIV infection in the region” (Orish et al., 2014).

It is significant to point out that the findings of this dissertation confirms the findings of earlier researchers such as Pettifor et al. (2008) and Orish et al. (2014), that people who attained higher level of education are less likely to have HIV infection compared with those with none/basic education. The findings of this dissertation, however, point to the fact that increasingly, those with higher education (master’s degree) are also been infected with HIV. Nonetheless, the gap between the less educated and the highly educated in association to HIV infection is still wide. It is therefore significant to conclude that attainment of higher education should be encouraged among Ghanaians so as to reduce the rate of HIV infection in the country.

With regards to religious association of participants, majority of them, constituting eleven (11), indicated that they are Christians whereas the second majority were Muslims, constituting five (5) of the participants. Only one (1) of the participant indicated that he is a traditionalist. This shows that majority of people of living with HIV in Ghana are religiously inclined. This explains why most participants of this study revealed that use prayer and trusting God for His protection as a coping strategy to overcoming psychological factors that negatively affects their mental wellbeing.

Finally on the demographic characteristics of the participants, the study revealed that the occupation of participants ranges between businessmen/women; and hairdressers; with three (3) of them being unemployed. The occupation of the participants signify that they all work in the informal sector of the Ghanaian economy. This means that those who are engaged in the formal sector are less likely to get infected with HIV compared to those in the informal sector. This could be as a result of the fact that people who attained higher level of education are, usually, employed in the formal sector in Ghana and those with lower or no formal education are, usually, employed

in the informal sector of the Ghanaian economy. Since this study, just like the studies Pettifor et al. (2008) and Orish et al. (2014), pointed out that people who attained higher level of education are less likely to have HIV infection compared with those with none/basic education, this explains why most of the participants of this study are employed in the informal sector of Ghana.

5.3 Psychosocial Factors associated with Mental Health Problems amongst People Living with HIV.

The first objective of this study was to identify psychosocial factors associated with mental health problems amongst people living with HIV at 37 military hospital in Accra. The results of the study revealed that that several psychosocial factors are associated with mental health problems amongst people living with HIV. Specifically for people living with HIV at 37 Military Hospital, the dominant psychosocial factors that is associated with their mental health problems include: sadness (depression); societal rejection; suicidal thoughts; drunkenness; sleeplessness; inferiority complex; and shame. These psychosocial factors are dominant among people living with HIV in Ghana mainly because of the name calling, discrimination and stigmatization that are associated with HIV in the Ghanaian society. As explained by some of the participants, although they did not disclose their HIV status to most of their family members, friends and colleagues at work, deep within themselves, they usually feel unwelcomed by such family members, friends and colleagues at work.

This is an indication that the Ghanaian society is very endemic with name calling, stigmatization and discrimination and against people living with HIV. These name calling, stigmatization and discrimination therefore makes people living with HIV vulnerable to mental health challenges, such as sadness (depression), societal rejection, suicidal thoughts, drunkenness, sleeplessness, inferiority complex and shame. This HIV-related stigma and discrimination therefore affect the

healthcare and quality of life of persons living with HIV. Consequently people living with HIV may end up dying early as a result of these mental health challenges and not necessarily through HIV. This finding of the study is in line with Basha et al. (2019) who stated that people living with HIV are most often affected with poor self-esteem, stigma, and discrimination which predisposes them to psychological problems such as depression and anxiety.

In addition to the above, the prevalence of name calling, stigmatization and discrimination against people living with HIV in Ghana also makes it difficult for people to do voluntary HIV test. This is dangerous for the country because they may be a lot of people who might be infected with HIV who are not aware that they are infected with the virus. Those people may also continue to spread the virus among the Ghanaian populace. This finding is in line with Amoako (2016) and Iddrisu, Opoku-Ameyaw, Bukari, Mahama & Akooti (2019) who conducted a similar study in Ghana and found out that HIV-related stigma and discrimination affects the confidence of people living with HIV and prevent them from doing voluntary HIV test.

In conclusion, it is very significant to point out that, the findings of this study are indication that there is the need for intensive public education to be done among Ghanaians to desist from name calling, stigmatization and discrimination against people living with HIV. This is very significant to prevent the mental psychosocial factors that people living with HIV are exposed to in Ghana. Consequently, the prevention of name calling, stigmatization and discrimination against people living with HIV will also make it possible for such people to have a good mental health and live a productive, healthy and long lives even with HIV virus.

5.4 Coping Strategies Used by People Living with HIV in addressing Mental Health

The second objective of this study was to explore coping strategies used by people living with HIV to address mental health problems at 37 military hospital in Accra. The results of the study revealed

that participants use prayer to God and trust in His protection; engagement of other people for happiness; and personal consolation as coping strategies to address their mental health problems. According to Ghana's 2010 Population and Housing Census Report (the most recent nation-wide census report), "Christianity is the largest religion in Ghana, with approximately 71.2% of Ghana's population being member of various Christian denominations". This is followed by 17.6% Muslims, 5.2% Traditionalists and 5.2% being people who do not believe in any religion (Ghana Statistical Service, 2012). This means that a significant number of Ghanaians (94%) believe in God and also trust that God is capable of healing their disease or protecting them. This therefore explains the reason why majority of the participants stated that they use prayer to God and trust in His protection as a coping strategy to address mental health problems. This is in line with Dube (2018) which revealed the fact that many people resort to faith in God the management and prognosis of mental illness and challenges in Iraq.

With regards to the use of engagement of other people for happiness as a coping strategy, Tandler, Krauss & Proyer, R. T. (2020), in a recent study revealed that, there is a positive associations between peer-peer orientations to happiness as an adaptive coping strategies in managing stress ensuring mental wellbeing. This means that the engagement of peers (friends, work colleagues, family members) serves as a mechanism through which people usually get relieve from psychosocial factors associated with mental health problems. This therefore explains why some participants of this study mentioned engagement of other people for happiness as a coping strategies of addressing their mental health problems.

5.5 Mental Health Needs of People Living with HIV

The third objective of this study was to identify the mental health needs of people living with HIV at 37 military hospital in Accra. The results of the study shows that the necessity of regular

attendance to hospital; lack of funds to buy additional medicine; and lack of employment are the major mental health needs of people living with HIV at 37 military hospital in Accra. As illustrated in the responses of respondents, the time invested in attending hospital every three months; lack of employment; coupled with the demands to buy additional medicine are major needs that poses psychological and mental stressors to people living with HIV. The lack of employment and the its consequence financial burden which poses mental stressors to people living with mental health in Ghana is likely because of the stigmatization and discrimination against people living with HIV (PLWH). The stigmatization makes difficult for PLWH to confidently seek for job and the discrimination makes it worst since most employers are likely to be hesitant in employing PLWH, especially when their HIV status is already known to others.

The above finding is in line with Zhang, Li, Liu, Qiao, Zhang, Zhou, & Tang (2016) conducted a similar study in China and found out that as a result of stigma, people living with HIV have heavier financial burden compared to their peers without HIV. The best mechanism to reduce such financial burden on PLWH, as recommended by Zhang et al. (2016) in China, is to implement tailor made efforts to overcome stigma and discrimination against PLWH in Ghana. In order to overcome the necessity of regular attendance to hospital, which poses psychological and mental stress to people living with HIV, it is important for the number of anti-retroviral drugs giving them during their visit to the hospital should be increased so that, instead of visiting the hospital every three months for drugs, they will visit the hospital at most 2 times in a year.

5.6 Challenges Encountered during the Study

Data collection was very stressful and required a lot of ethical consideration and confidentiality.

First and foremost, as a result of Covid-19 related restrictions on the movement of persons in Ghana, the researcher wanted to resort to phone interviews with selected participants. Participants were however hesitant to give out their information to the researcher on phone. As a result, it became very necessary for the researcher to do in-person data collection at the 37 military hospital as and when participants came for their antiretroviral therapy. This, therefore, delayed the data collection process.

Secondly, as a result of HIV related stigma, most of the participants wanted to leave the premises of the hospital as soon as they were done with their antiretroviral therapy. Some selected participants, therefore, could not wait to be interviewed since they were in hurry to leave the hospital. The researcher had to use extra days in getting replacement for such participants. This also delayed the data collection process.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the conclusion and recommendation of the study. Key conclusions are established in accordance with the objectives of the study. Based on the conclusions of the study, recommendations are offered.

6.2 Conclusion

Psychosocial factors that are associated with mental health problems amongst people living with HIV include: sadness (depression); societal rejection; suicidal thoughts; drunkenness; sleeplessness; inferiority complex; and shame.

Secondly, the major coping strategies that have been developed by people living with HIV in order to address their mental health problems include: prayer to God and trust in His protection; engagement of other people for happiness; and personal consolation.

Finally, the necessity of regular attendance to hospital; lack of funds to buy additional medicine; and lack of employment are the major mental health needs of people living with HIV.

6.3 Recommendations

Based on the conclusions of the study, the following recommendations are made to practitioners and future researchers. Specifically, these practitioners include Non-governmental Organisations (NGO) in health services, the 37 Military Hospital, the Ghana Mental Health Authority, Ghana AIDS Commission, the Ghana Health Service, the Ministry of Health and any other government institutions in the health sector that have the mandate to provide quality mental healthcare and health services to people living with HIV. The recommendations are categorized under each of the objectives as follows:

6.3.1 Objective 1: Psychosocial factors associated with mental health problems amongst people living with HIV

There is the need for intensive public education to be done among Ghanaians to desist from name calling, stigmatization and discrimination against people living with HIV. The Ghana Health Service, the Ghana Aids Commission, the Ghana Mental Health Authority, Ghana AIDS Commission, the Ministry of Health and NGOs in health education should intensify the sensitization of the Ghanaian populace so as to end the stigmatization and discrimination against people living with HIV. This is very significant to prevent the psychological and mental health challenges that people living with HIV are exposed to in Ghana

6.3.2 Objective 2: Coping strategies needed to address mental health problems among people living with HIV

Engagement of other people for happiness is an effective coping strategy in helping PLWH to address their mental health problems. NGOs in health and sports programs should therefore regularly organize recreational and sporting activities for PLWH so that they can use the opportunity to engage other people and be happy.

PLWH are also encouraged to patronize recreational activities with their families and friends so as to be happy.

6.3.3 Objective 3: Mental health needs of people living with HIV at 37 military

In order to reduce the burden caused by the necessity of regular attendance to hospital, which poses psychological and mental stress to people living with HIV, it is recommended that all hospitals, including 37 Military Hospital, should increase the number of antiretroviral drugs giving to PLWH during their visit to the hospital. As a result, instead of visiting the hospital every three months for drugs, PLWH will only visit the hospital at most twice a year.

In Addition, the 37 Military Hospital, and all other health institutions, should engage PLWH in compulsory psychological counseling when they come to the hospital for their antiretroviral therapy. Through such counselling, health experts and psychologists can help PLWH to find solution to the some of their mental health needs.

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APPENDICES

Appendix 1 Main Themes and Sub-themes

Main Themes	Sub-themes
Psychosocial factors associated with mental health problems amongst people living with HIV	i. Sadness (Depression) ii. Suicidal thoughts iii. Societal Rejection iv. Inferiority Complex v. Shame vi. Drunkenness vii. Sleeplessness
Coping strategies used by people living with HIV to address mental health problems	i. Engaging other people to find happiness ii. Praying and trusting God's protection iii. Personal Consolation
The mental health needs of people living with HIV at 37 military hospital in Accra	i. Necessity of regular attendance to hospital ii. Lack of funds to buy additional medicine iii. Lack of employment

Appendix 2 – Interview Guide

Participants ID:

A. General Questions

1. How old are you?
2. Are you married?
3. What is your religion?
4. What is your education level?
5. Where do you work?

B. Knowledge on HIV status

1. How did you know about your HIV status?
 - a. How has living with HIV been for you? (Listen for their experience since they found out their status, listen for changes/adjustments in their lifestyle)
2. Have you accepted your HIV status?
3. Are your family and friends aware of your status?
 - a. What about your workplace?
 - b. If yes, did they accept you well?**
 - c. If no, why have you not told them?
 - i. Are you planning to tell them?

C. Psychosocial factors associated with mental health

- a. What are your emotional challenges and challenges in general?
 - i. What have you found to be helpful in dealing with it?
- b. How do you feel that you are HIV positive?
 - i. How do you see yourself?
- c. Has it (HIV) affected your relationship with other people? (Probe if positively or

negatively)

D. Coping strategies used to address mental health by PLWH

1. How is a typical day like for you?
2. How long have you been coming to the hospital?
 - d. Is your house far from the hospital? (Probe on what they feel about the distance to the hospital)
 - e. Do you get access to medication always?
 - f. What type and dosage?
 - a. **Whether the regimen has changed** and what they feel about that
 - b. How do you feel about taking your medications? (Probe if they feel okay why, if not why)
 - c. How often do you come to pick your dosage or refills?
 - g. Is the medication free?
 - a. If not, how do you pay for it?
 - h. Do people see you taking your medication?

E. Mental health needs of PLWH

1. Do you have any other relationship that is important to you?
2. What kind of help do you get from other people?
3. What advice do you have for people living with this condition?
 - i. If not address: what does living with HIV MEAN to you?
4. What else would you like to share with me about living with HIV?

Appendix 3 – Participant information sheet

Title of Study: Mental Health Problems amongst People Living with HIV at the 37 Military Hospital, Accra.

Introduction

My name is Ms. Benedicta Enyonam Nkornoo-Azasoo from the University of Ghana. A Master student in Applied Health Social Sciences (AHSS) at the School of Public Health.

Background and Purpose of Research/Study

I am kindly requesting you to participate in this research which seeks to explore the mental health problems amongst people living with HIV (PLWH) at the 37 military hospital in Accra, Ghana. Your opinion and views will be useful in answering questions aimed at understanding the mental health problems amongst PLWH. The study aims at identifying psychosocial factors associated with mental health problems, explore coping strategies used by PLWH to address mental health problems and to identify the mental health needs of PLWH.

Procedure

I will be conducting in-depth interviews and the conversation will be audio recorded and notes taken by my assistant. This interview will take **30 minutes** of your time. We will record your bio-data with the exception of your name and other personal information. Codes will be used to identify participants. You have the right to:

1. To agree or disagree to the recording of conversation.
2. To ask further explanation on questions for better clarification.
3. To ask what and how your information will be used.
4. Choice of language for better expression of yourself.

Possible Benefit

There is no direct benefit to you for taking part in this study. We hope that what we learn from you will add to the knowledge about the mental health challenges/problems HIV patients attending the 37 Military Hospital experience. Improved healthcare systems, service delivery and awareness on mental health issues for people living with HIV.

Possible Risks and Discomforts

In completing the interview questions, you may be emotionally disturbed. In such case you may stop answering the questions and you may be referred to a specialist for support/attention.

Confidentiality

The information and data collected from you will not be showed to anyone except the study team and the IRB. Information on computers will be password protected. Hard copies will be stored in locked cabinets.

Privacy

Privacy will be assured by interviewing you at a convenient place.

Appendix 4 - Informed Consent Form

Title of Study: Mental Health Problems Amongst People Living with HIV at the 37 Military Hospital, Accra.

Researcher/Student: Ms. Benedicta Enyonam Nkornoo-Azasoo.

Institution: School of Public Health, College of Health Sciences, University of Ghana-Legon.

General Information about Research

HIV is a Public Health Problem in Ghana and people living with the disease may face high level of stigma. Stigmatization, discrimination and marginalization may further lead to poor physical and mental health. Studies in some countries have indicated a higher prevalence of mental health problems among HIV infected people. The purpose of this study is to find out from people living with HIV attending clinic at the 37 Military Hospital the mental problems that they are facing.

If you agree to take part in this study, an interview will be conducted with you which will take about 30 minutes.

Possible Risks and Discomforts

In completing the interview questions, you may be emotionally disturbed. In such case you may stop answering the questions and you may be referred to a specialist for support/attention.

Possible Benefits

There is no direct benefit to you for taking part in this study. We hope that what we learn from you will add to the knowledge about the mental health challenges/problems HIV patients attending the 37 Military Hospital experience. Improved healthcare systems, service delivery and awareness on mental health issues for people living with HIV.

Confidentiality

The information and data collected from you will not be showed to anyone except the study team and the IRB. Information on computers will be password protected. Hard copies will be stored in locked cabinets.

Voluntary Participation and Right to Leave the Research

Taking part in this study is your choice. You can choose to be in the study, or you can decline. If you choose to be in the study, you still can change your mind at any time. Whatever choice you make will not have any effect on your treatment at the 37 Military Hospital. You may withdraw from the study at any time.

Provision of Information and Consent for Participants

If you agree to participate in the study, you will sign/thumbprint a paper copy of this form. You will be provided with a copy of this information form for your records. The research team will keep a copy for its records.

Benefits for Additional Information

Please feel free to ask about anything you don't understand. **If you have questions** later, you can call the Researcher on 0547943327

Rights as a Participant

The research has been reviewed and approved by the Institutional Review Board of 37 Military Hospital. If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the line 0243004247.

VOLUNTEER AGREEMENT

The above document describing the benefits, risk and procedure for the research title: **Mental Health Problem Amongst People Living with HIV at the 37 Military Hospital, Accra** has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date

Signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date

Signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date

Signature of person Who Obtained Consent