

**HIV AND AIDS RELATED STIGMA AND DISCRIMINATION AMONG NURSES IN
THE SEKONDI-TAKORADI METROPOLIS OF GHANA**



BY

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DECLARATION

I hereby declare that except for references to other people's work which have been duly acknowledged, this dissertation is the result of my own original research and has never been presented either in part or whole for another degree elsewhere

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DEDICATION

This work is dedicated to my parents, Felicia Arthur and Amos Offei Affedzie

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TABLE OF CONTENTS

Title	Page
Declaration.....	i
Dedication.....	ii
Acknowledgements	iii
Table of Contents.....	iv
List of Tables.....	ix
List of Figures.....	x
List of Abbreviations and Acronyms.....	xi
Abstract.....	xii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Statement of the problem.....	8
1.3 Purpose of the Study.....	10
1.4 Objectives of the Study.....	10
1.5 Research Questions	10
1.6 Significance of the Study.....	11
1.7 Organization of the study.....	12
1.8 Operational Definition of Terms.....	13

CHAPTER TWO: LITERATURE REVIEW	15
2.0 Introduction.....	15
2.1 Theoretical Review.....	15
2.1.1 Theoretical development of the concepts of stigma and discrimination.....	15
2.1.2 Stigma and Discrimination related to HIV and AIDS.....	20
2.1.3 Measurement of HIV and AIDS Related Stigma and Discrimination (HARSAD).....	22
2.1.4 The Healthcare Provider HIV/AIDS Stigma Scale (HPASS).....	26
2.1.4 Theories of HIV and AIDS related Stigma and Discrimination (SAD).....	27
2.2 Empirical Review	40
2.2.1 Measurement of prevalence of HARSAD among nurses.....	40
2.2.2. Demographic, professional characteristics and work experiences of nurses which influence their perpetration of HARSAD.....	47
2.2.3 Relationship between knowledge of HARSAD and perpetration of HARSAD.....	49
2.2.4 Relationship between HIV testing and Mechanisms of Stigma.....	51
2.3 Conceptual Framework of the Study.....	54
2.3.1 Linkages between the Framework, Objectives and the Research Instrument.....	57
2.4 Summary of Literature Review.....	58

CHAPTER THREE: METHODOLOGY	61
3.0 Introduction.....	61
3.1. The Study Population.....	61
3.2 The Study Sample.....	62
3.3 Research Design.....	63
3.4 Research Setting.....	63
3.5 Sampling.....	65
3.5.1 Sample Size determination.....	65
3.5.2 Sampling Procedure.....	66
3.6 Research Instrument.....	71
3.7 Test of Validity and Reliability of the Instrument.....	72
3.8 Data Collection Procedure.....	74
3.9 Ethical Considerations.....	75
3.10 Data Analysis.....	77
3.11 Dissemination of Research Findings.....	78
CHAPTER FOUR: ANALYSIS OF DATA AND PRESENTATION OF RESULTS	79
4.0 Introduction.....	79
4.1 Demographic characteristics of respondents.....	80
4.2 Professional characteristics of respondents.....	81
4.3 Correlations among respondents' demographic and professional characteristics.....	82
4.4 Respondents' work experience with People Living with HIV and AIDS (PLWHA).....	84

4.5 Correlation between respondents' experience of working in HIV/AIDS units and frequency of interaction with PLWHA.....	85
4.6 Comparison of frequency of interaction with PLWHA among respondents.....	86
4.7 History of HIV testing among respondents.....	88
4.8 Willingness to do HIV testing among respondents.....	89
4.9 Relationship between previous test and current willingness to test for HIV.....	90
4.10 Knowledge of HIV and AIDS related SAD among respondents.....	91
4.10.1 Responses to questions about what constitute HARSAD.....	92
4.10.2 Knowledge score distribution among respondents.....	97
4.10.3 HARSAD knowledge levels among respondents.....	98
4.10.4 Association between knowledge and characteristics of respondents.....	99
4.11 Mechanisms of HIV Stigma among respondents.....	100
4.11.1 Prevalence of HARSAD among the study population.....	103
4.11.2 Association between HARSAD among the respondents and their demographic, professional characteristics and work experiences with PLWHA.....	104
4.11.2 Association between HARSAD knowledge and HARSAD.....	108
4.11.3 Association between HARSAD and HIV Testing.....	110
4.11.4 Summary of results.....	111
CHAPTER FIVE: DISCUSSION OF FINDINGS.....	112
5.0 Introduction.....	112
5.1 Prevalence of HARSAD among nurses in Sekondi-Takoradi.....	113
5.2 Influence of demographic, professional characteristics and work experiences of the nurses on their perpetration of HARSAD.....	116

5.3 Knowledge of HARSAD and its influence on perpetration of HARSAD.....	118
5.4 Relationship between HIV testing and the mechanisms of HARSAD.....	121
CHAPTER 6: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	122
6.0 Introduction.....	122
6.1 Summary.....	122
6.2 Conclusion.....	127
6.3 Recommendations.....	128
REFERENCES.....	131
APPENDICES.....	141

LIST OF TABLES

Table 2.1: Summary of HIV/AIDS stigma theories reviewed.....	38
Table 4.1: Demographic characteristics of respondents.....	80
Table 4.2: Years of nursing practice and nursing ranks of respondents.....	81
Table 4.3: Correlation analysis among demographic and professional characteristics..	82
Table 4.4: Respondents’ work experiences with PLWHA.....	84
Table 4.5: Cross tabulation between respondents’ experience of working in HIV/AIDS units and frequency of interaction with PLWHA.....	85
Table 4.6: Cross tabulation between previous test and willingness to test for HIV.....	90
Table 4.7 HARSAD knowledge test questions.....	91
Table 4.8: Participants’ answers to questions testing their knowlegse of HARSAD...	92
Table 4.9: Knowledge scores and knowledge levels obtained by respondents.....	98
Table 4.10 Chi-Square tests between knowledge scores and other variables.....	99
Table 4.11 Summary of responses in agreement or disagreement on the Modified Health Provder HIV/AIDS Stigma Scale (MHPASS).....	101
Table 4.12 Descriptive statistics for MHPASS items.....	102
Table 4.13 Descriptives, correlations and coefficients of the multiple regression model.....	103
Table 4.14: Model summary and ANOVA of the multiple regression model.....	103
Table 4.15: Linear regression between HARSAD knowledge and HARSAD.....	108
Table 4.16 Chi-Square tests between HARSAD and HIV testing.....	110

LIST OF FIGURES

Figure 2.1: The HIV Stigma Framework.....	29
Figure 2.2: The Social Contact Theory (SCT) of HIV/AIDS Stigma.....	34
Figure 2.3: Model of the dynamics of HIV/AIDS stigma.....	37
Figure 2.4: Conceptual framework for the study	54
Figure 3.1: Map of Sekondi-Takoradi Metropolitan Assembly (STMA).....	63
Figure 3.2: Flowchart outlining the sampling technique and final sample.....	70
Figure 4.1: Comparison of frequency of interaction with PLWHA among respondents.....	86
Figure 4.2: History of HIV testing among respondents.....	88
Figure 4.3: Rating of willingness to do HIV testing.....	89
Figure 4.4 Performance of respondents on HARSAD knowledge test.....	93
Figure 4.5 HIV and AIDS related SAD knowledge score distribution among respondents.....	97
Figure 4.6 Prevalence of HARSAD among the respondents.....	103

LIST OF ABBREVIATIONS AND ACRONYMS

AIDS: Acquired Immune Deficiency Syndrome

HARSAD: HIV and AIDS related Stigma and Discrimination

HCW: Healthcare worker

HCP: Healthcare provider

HIV: Human Immunodeficiency Virus

HSF: HIV Stigma Framework

HPASS: Healthcare Provider HIV/AIDS Stigma Scale

MHPASS: Modified Healthcare Provider HIV/AIDS Stigma Scale

PIHIV: People infected with HIV

PLWHA: People/patients living with HIV and AIDS

PUHIV: People uninfected with HIV

SAD: Stigma and discrimination

STMA: Sekondi-Takoradi Metropolitan Assembly

SSA: Sub-Saharan Africa

UNAIDS: Joint United Nations Programme on HIV/AIDS

WHO: World Health Organization

VCT: Voluntary counseling and testing

ABSTRACT

This study addressed the problem of stigma and discrimination (SAD) exhibited by nurses against patients living with HIV and AIDS (PLWHA). The study was conducted among nurses in the Sekondi-Takoradi Metropolitan Assembly (STMA) in the Western Region of Ghana. It measured the prevalence of HIV and AIDS related stigma and discrimination (HARSAD) among the nurses, assessed their knowledge of HARSAD and examined the influence of their knowledge and personal characteristics on their perpetration of HARSAD. The study was quantitative descriptive cross-sectional survey. The study sample consisted of 286 nurses selected by convenience sampling from five hospitals selected by purposive sampling. A self-administered questionnaire was used to collect data using the paper and pen/pencil approach. Data collected included the nurses' demographic and professional characteristics, work experiences with PLWHA, HIV testing history and willingness. HARSAD knowledge was tested with ten closed ended questions with Yes/No/Unknown response options. HARSAD tendencies were assessed with the modified Healthcare Provider HIV/AIDS Stigma Scale (MHPASS) consisting of 15-items of which 5 items each assessed for prejudice, stereotypes and discrimination respectively on a 6-Point Likert Scale. Data was analyzed with the Statistical Package for Social Sciences (SPSS) software version 23. The results showed HARSAD prevalence of 24.11% among the nurses. Prejudice was highest at 30.53% followed by stereotypes at 28.58% and discrimination at 13.24%. Significant predictors of HARSAD included age, years of nursing practice and experience of working in HIV/AIDS units. HARSAD knowledge among the nurses was generally moderate but had no significant influence on their perpetration of HARSAD. 91.6% of the nurses had done HIV test before and

58.74% were willing to test. Testing history had no significant influence while testing willingness had significant negative influence on HARSAD. Conclusion based on the findings was that 24.11% of the nurses exhibited SAD tendencies against PLWHA. The extent of HARSAD exhibited was influenced by their age, years of nursing practice and experience of work in HIV/AIDS units but not by their knowledge of HARSAD nor previous HIV testing experience. Discrimination tendencies however influenced HIV testing willingness. Recommendations emphasized the need for HARSAD reduction interventions to focus more on younger nurses and HARSAD knowledge to be complemented with behaviour change communication in order to effect change of behavior of nurses towards PLWHA.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The emergence of Human Immunodeficiency Virus (HIV) which causes Acquired Immune Deficiency Syndrome (AIDS) on the global stage in the 1980s brought with it an ominous cloud of fear that spread all over the world, as getting infected with HIV meant certain progression to AIDS and death (Sharp and Hahn, 2011; Fauci, 1999). The deadliness of the infection, ignorance and misconceptions about it and how it is transmitted and negative perceptions about its victims fueled a culture of stigma and discrimination (SAD) against people living with HIV (PLHIV) which continues to hamper progress towards ending the HIV and AIDS pandemic (Avert 2016).

After three decades of the HIV and AIDS pandemic (Avert 2017), 35 million people have already died from AIDS related illnesses while 36.7 million people are still living with the infection around the world (UNAIDS, 2017b). Sub-Saharan Africa (SSA) carries over 70 percent of the global burden of PLHIV of which 10 countries account for almost 80 percent (Kharsany & Karim, 2016). Ghana, characterized as a low-level epidemic country (Kharsany & Karim, 2016) has about 290,000 PLHIV representing 0.82 percent of the global burden (UNAIDS, 2017a). According to the 2016 national HIV sentinel survey report, Ghana had a national HIV prevalence rate of 2.4% among pregnant women showing a rise from 1.8% in the previous year (GHANA AIDS COMMISSION, 2017).

The global HIV and AIDS situation shows drastic decline in AIDS related deaths, declining incidence of new HIV infections and increasing HIV prevalence rate as PLHIV are living longer lives, thanks to widening access to antiretroviral therapy (ART) around the world (Kharsany & Karim, 2016, UNAIDS, 2017b). The availability of effective treatment has transformed the prognosis of HIV infection from a death sentence to a long term manageable chronic condition with near normal life expectancy as those who are not infected (Katz and Maughan-Brown, 2017, Trickey, et al (2017).

This encouraging trend is however marred by the persistence of HIV and AIDS related stigma and discrimination (HARSAD) against people living with HIV and AIDS (PLWHA) in many parts of the world including Ghana. According to the 2014 Ghana Demographic Health Survey (DHS), 67.7 percent of adults (15-49) responded ‘No’ to the question: “Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?” This indicates high levels of stigma and discrimination (SAD) against PLWHA among the general population (UNAIDS, 2017a). This is a major problem that undermines efforts to effectively suppress the HIV and AIDS epidemic (UNAIDS, 2014; Avert 2016). Eliminating HARSAD against PLWHA is therefore a major goal in the fight against HIV and AIDS (Ghana Aids Commission, 2013, UNAIDS, 2014).

Much of the work of global and local organizations involved in the fight against HIV and AIDS such as the Joint United Nations Programme on HIV and AIDS (UNAIDS), the Global Network of People living with HIV (GNP+), Ghana AIDS Commission (GAC), Ghana Health Service (GHS), National AIDS Control Programme (NACP) and other civil societies and Non-Governmental Organizations (NGO) has been directed at

eliminating HARSAD against PLWHA. Monitoring the progress of such work requires periodic assessment of HARSAD among various populations and groups to know whether it is abating and to provide current information for planning more effective interventions against it. The Ghana HIV and AIDS and Sexually Transmitted Infections (STI) Policy recommends continuous monitoring of HARSAD through periodic population based surveys (GAC, 2010). It is therefore pertinent that research is conducted to monitor HARSAD enacted by healthcare providers such as nurses against patients living with HIV and AIDS (PLWHA) for whom they provide nursing care.

Stigma and discrimination (SAD) has been studied extensively in various contexts. Generally, stigma is defined as “a strong feeling of disapproval that most people in a society have about something, especially when this is unfair” (Cambridge Dictionary). It involves social disapproval of a person due to the person’s exhibition of a specific attribute that is perceived to distinguish them negatively from other members of society.

Although the terms stigma and discrimination are often used together, they have different connotations. Stigma involves negative “attitudes and beliefs” about a person while discrimination involves unfair “behavior” towards the person (Disability Rights California, n.d). Thus, being perceived as a socially discredited person is stigma while being treated unjustly is discrimination. The negative perception about the person results in unjust treatment or discrimination against them (Goffman, 1963). Stigma and discrimination (SAD) related to HIV and AIDS involves negative attitudes, beliefs and unjust treatment against people identified or suspected to be living with HIV and AIDS. Having HIV infection or AIDS is perceived as a discredited attribute which results in discrimination against PLWHA.

HIV and AIDS related stigma and discrimination (HARSAD) occurs in various ways. It is usually manifested as negative attitudes towards PLWHA and violation of their human rights (Kohi et al. 2006). It may occur as “gossip and verbal abuse, judgments and morally driven assumptions about how PLHIV acquired the infection, violence and physical abuse” (Health Policy Initiative, 2010. p.9). It may also take the form of “denial of health care, unjust barriers to service provision, inferior quality of care, lack of respect, abuse and other forms of mistreatment, violation of physical autonomy, mandatory testing or treatment and compulsory detention” (“zeroHIVdiscrimination”, 2017). It also involves shunning of people living with or suspected to be living with HIV and AIDS which makes them feel socially different and excluded (Parker and Aggleton 2003).

HARSAD against PLWHA has been shown to be driven by many factors. These include fear of the life threatening nature of HIV and AIDS and ignorance and misconception about its mode of transmission Carr, Kidd, Fitzgerald, and Nyblade, 2015). The irrational fear of getting infected leads to avoiding contact with PLWHA. HARSAD against PLWHA is also driven by entrenched social views about perceived immoral or deviant behaviors through which people are assumed to have gotten infected. Some of these perceived deviant behaviors as cause of infection include sexual promiscuity, homosexuality and injection of illicit drugs (NAM, 2017; Avert 2016). These judgmental attitudes persist despite the widely proven fact that people may get infected with HIV through other means such as needle stick injuries, medical injections with infected needles, transfusion with infected blood and blood products, transplant of infected body parts and mother to child transmission among others (Wolf and Lo, 2001).

HARSAD has many negative consequences. It subjects PLWHA to psychological distress and affects their behavior and health (Stutterheim, Pryor, Bos, Hoogendijk, Muris, & Schaalma, 2009; Earnshaw & Chaudoir, 2009). The fear of stigmatization and discrimination discourages disclosure of HIV seropositive status to significant others (Derlega et al., 2004.). It also results in avoidance of HIV testing (Evageli, Pady, & Wroe, 2016) refusal to access appropriate care and non-adherence to treatment leading to preventable morbidity and mortality from HIV and AIDS and perpetuation of the epidemic (Avert, 2016; Chesney & Smith, 1999).

Healthcare workers being part of the general population are not exempt from the general culture of HARSAD against PLWHA in society (Carr, Kidd, Fitzgerald and Nyblade, 2015; Health Policy Initiative, 2010). This study focused on nurses who constitute the largest group of healthcare professionals in the healthcare system and are the primary providers of hands-on care for PLWHA in the healthcare setting. “Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well in all settings and includes the promotion of health, prevention of illness and care of ill, disabled and dying people” (ICN, 2017).

Nurses play a pivotal role in the fight against HIV and AIDS. Nurses are mostly the first point of call for people accessing HIV and AIDS prevention, treatment, care and support services as they serve as a trusted source of information, education and communication to people in the community about HIV and AIDS. Nurses who work in voluntary counseling and testing (VCT) centers are usually the first recipients of new entrants into the HIV and AIDS care and support system.

Furthermore, nurses provide education, counseling, testing and referral to appropriate levels of care for patients. In addition, they spend the most time with patients on the ward when admitted for in-patient care and provide physical care and psychological support for such patients (FHI, 2007). They also play advocacy role on behalf of patients to advance their welfare (ICN, 2017). Nurses therefore occupy a central position in the care of patients living with HIV and AIDS.

As trained healthcare professionals, it is logical to expect nurses to be better informed about HIV and AIDS than the general population, hence have healthier perceptions and friendlier attitudes towards their patients living with HIV and AIDS (PLWHA). Unfortunately, this is not always the case as several studies have proven the perpetration of HARSAD against PLWHA by healthcare workers including nurses (Dawson-Amoah, 2015; Sullivan, 2015). For instance, discriminatory practices observed among healthcare providers include labeling the folders of PLWHA with a special tag or code name, designating specific beds or wards for admitting only PLWHA, performing HIV test on patients suspected to be infected with HIV without their informed consent and referring PLWHA to other healthcare providers even though the level of care needed is within the capacity and competency level of the referring healthcare provider (Batey et al. 2015).

Other manifestations of HARSAD observed among healthcare providers include excessive precautionary measures taken when caring for PLWHA. This include avoiding to touch them with bare hands, wearing gloves for procedures where there is no need for them and wearing of double gloves due to fear of getting infected. It is important to distinguish between necessary and appropriate precautionary measures and discriminatory practices in the care of PLWHA. Discriminatory practices involve treating

PLWHA differently from other patients who do not have HIV infection in a manner that is unnecessary and unfair. For instance wearing of gloves before touching a patient who has HIV during nursing procedures which do not necessarily require wearing of gloves will be considered as a discriminatory practice rather than a necessary precautionary measure. However, applying universal precautions such as wearing gloves for all contacts with bodily fluids of all patients regardless of their diagnosis will not be considered as a discriminatory practice even when performed on a PLWHA as it is clinically indicated. Whether a practice is discriminatory or a necessary precaution therefore depends on the clinical indication for procedure being performed. Excessive use of precautionary measures when caring for PLWHA may contribute to discrimination against them.

It cannot be overemphasized that nurses are so pivotal to HIV and AIDS treatment, care, support and prevention that perpetration of HARSAD against PLWHA by nurses could gravely undermine the control and prevention of HIV and AIDS and hamper the progress towards ending the HIV and AIDS epidemic. It is therefore necessary to study HARSAD perpetrated by nurses against patients living with HIV and AIDS (PLWHA) to know the magnitude of the problem and find ways of eliminating it.

1.2 Statement of the Problem

HIV and AIDS related stigma and discrimination (HARSAD) is widely acknowledged as a major problem which militates against the control and prevention of HIV and AIDS (Avert, 2016, UNAIDS 2016; GAC, 2014, Chesney & Smith, 1999). The existence of such a problem in the healthcare setting, the very place where people living with HIV and AIDS come for treatment, care and support no doubt makes its negative effects more deleterious (Health Policy Initiative, 2010, Carr, Kidd, Fitzgerald, and Nyblade, 2015).

Due to the centrality of nurses' role in HIV and AIDS prevention, care and support, their perpetration of HARSAD present huge challenges for the control of HIV and AIDS. It not only prevents PLWHA from accessing life sustaining treatment but also discourages the utilization of HIV and AIDS services provided by nurses such as voluntary counseling and testing (Avert, 2016, Evageli, Pady, & Wroe, 2016).

The avoidance of HIV services such as testing and treatment provided in healthcare facilities by qualified nurses raises uncountable problems for the management of HIV and AIDS and healthcare in general. It may cause patients to resort to unaccredited providers at unrecommended places such as prayer camps and traditional healers where they feel more accepted. The treatment they get at such places are however usually unrecommended and quark treatments with claims of cure which only worsen their condition. It could also fuel mother to child transmission of HIV and contribute to maternal and child mortality. This could result from the refusal of pregnant women to access antenatal services in their bid to avoid HIV testing. This could lead to missed and untreated HIV infections which are then transmitted to the unborn child, not to talk of the missed benefits of antenatal services. (Obermeyer & Osborn, 2007).

The magnitude of HARSAD exhibited by nurses against patients living with HIV and AIDS in Ghana is underexplored. The last Stigma Index Study in Ghana was conducted in 2014 among PLHIV as the population of study and found high levels of HIV related stigma among PLHIV (GAC, 2014). Also, the extent of HARSAD among the general population has been estimated in the 2014 Ghana Demographic Health Survey (DHS, 2014). Moreover, studies on HARSAD in healthcare facilities usually focus on healthcare providers in general rather than nurses in particular (Dawson-Amoah, 2015). A gap therefore exists in terms of the paucity of current research which assess levels of HARSAD exhibited by nurses in Ghana. This study sought to fill this gap by assessing the current level of HARSAD exhibited by nurses against PLWHA in Ghana.

The study focused on Sekondi-Takoradi Metropolitan Assembly (STMA) in the Western Region of Ghana. This is because, The STMA features among the third highest HIV prevalence urban areas in Ghana, with a current HIV prevalence of 3.0 percent vis-à-vis the national prevalence of 2.4 percent according to the 2016 national HIV sentinel survey report (NACP, 2017). Also, due to the burgeoning oil and gas industry in the area, there is proven migration of people into the area with its resultant increased risk of HIV incidence (Habib, 2016). A study of the HARSAD exhibited by nurses in the STMA towards PLWHA is therefore pertinent.

In a nutshell, this research sought to answer the question, to what extent do nurses exhibit HIV and AIDS related stigma and discrimination (HARSAD) against patients living with HIV and AIDS (PLWHA) in the Sekondi-Takoradi Metropolitan Assembly of Ghana?

1.3 Purpose of the Study

The purpose of the study was to find out the extent of HIV and AIDS related stigma and discrimination (HARSAD) exhibited by nurses against patients living with HIV and AIDS (PLWHA) in the Sekondi-Takoradi Metropolitan Assembly (STMA) of Ghana.

1.4 Objectives of the Study

The objectives of the study were to:

1. Measure the prevalence of HARSAD among the nurses using the modified Healthcare Provider HIV/AIDS Stigma Scale (MHPASS).
2. Find out the influence of demographic, professional characteristics and work experiences of the nurses on their perpetration of HARSAD.
3. Find out the knowledge of the nurses about HARSAD and how it influences their perpetration of HARSAD.
4. Find out the relationship between the mechanisms of HARSAD and HIV testing among the nurses.

1.5 Research Questions

1. What is the prevalence of HARSAD among nurses in Sekondi-Takoradi?
2. What is the influence of demographic, professional characteristics and work experiences of the nurses on their perpetration of HARSAD?
3. What is the knowledge level of the nurses about HARSAD and how does it influence their perpetration of HARSAD?
4. What is the relationship between the mechanisms of HARSAD and HIV testing among the nurses?

1.6 Significance of the Study

Findings of this research have implications for policy formulation, planning for healthcare, education of nurses, behavior change communication for nurses and further research directions. In terms of policy formulation, findings about the prevalence of HARSAD exhibited by nurses provide feedback about the effectiveness of existing policies on HARSAD in healthcare settings. This feedback can help in evaluation and review of such policies to address the current situation on the ground.

In relation to planning for healthcare, findings about the prevalence of HARSAD exhibited by nurses reveal the magnitude of the problem so that adequate resources can be earmarked for tackling it when planning for healthcare and HIV and AIDS treatment, care, support, prevention and control.

In terms of education, findings about the knowledge of nurses about HARSAD reveal gaps in knowledge that need to be filled through continuous education and training. It could guide development of the content of educational materials for ongoing training of nurses about HARSAD in patient care. It will also help in designing appropriate behavior change communication (BCC) interventions for effecting behavior change among nurses towards PLWHA for whom they provide nursing care.

The findings of the study also have implications for further research and theory building about HARSAD. In testing the relationship between HIV testing and the mechanisms of HARSAD, the study puts to test the assertion by Earnshaw and Chadior (2011) in their HIV Stigma Framework that the mechanisms of stigma are related to the outcomes of stigma of which HIV testing is part.

It also tests the validity of the modified version of the Healthcare Provider HIV/AIDS Stigma Scale (HPASS) used in this study for measuring HIV and AIDS stigma and discrimination among healthcare providers. This could help in designing a universal instrument for measuring HARSAD in all health facilities in Ghana.

In a nutshell, the findings of this research yields valuable information that will help to design appropriate strategies and interventions for eliminating HARSAD exhibited by nurses not only in Sekondi-Takoradi but in the country as a whole and may be applicable in other parts of the world at large.

1.7 Organization of the study

This dissertation consists of six chapters. Chapter 1 provides a general background of the study, statement of the problem, purpose, objectives, related research questions and significance of the study. Chapter 2 provides a review of literature on the theoretical background of stigma and discrimination, HARSAD, the conceptual framework of the study and previous studies that address the objectives of the research.

Chapter 3 describes the methods and procedures used in doing the research. It includes a detailed description of the study population, research design, study setting, sampling technique, research instrument, data collection, data analysis and ethical considerations. Chapter 4 presents the result of analysis of data gathered from the study participants. The results are presented in the form of tables and figures and description of the relevant findings in line with the main research questions.

Chapter 5 involves discussion of the results from the data analysis in line with the study objectives and research questions, taking into cognizance findings from previous studies as well as contribution of new knowledge from the findings.

Chapter 6 provides a summary of the study, conclusion and recommendations for tackling the problem of HARSAD enacted by nurses against PLWHA based on the findings of this study. It also provides recommendations for future research.

1.8 Operational Definition of Terms

The following terms are hereby explained in terms of their use in this study regardless of how they may have been used elsewhere.

Knowledge score: this refers to the number of correctly answered questions out of the total number of questions asked about HARSAD in the study. A score below 4 out of 10 is considered as low knowledge level, a score from 4 to 5 out of 10 is considered as moderate knowledge level and a score from 6 to 10 out of 10 is considered as high knowledge level.

Mechanisms of stigma: This refers to a combination of three attributes comprising of prejudice, stereotypes and discrimination which are considered as the constituents of HARSAD. They are also referred to as mechanisms of HARSAD in this study.

Nurse: This encompasses all categories of healthcare providers registered and regulated by the Nursing and Midwifery Council of Ghana including general nurses, enrolled nurses, community health nurses, psychiatric nurses as well as midwives of all ranks.

Nursing care: this encompasses all the activities nurses perform for patients to assist them to regain or maintain health or to peaceful death.

Perception: This encompasses the personal observation, thought or belief of a person. In considering the perception of nurses about manifestations of HARSAD, reference is being made to what the nurses have observed, what they think or what they believe about the existence of various forms of HARSAD in their healthcare facilities.

Prevalence: The extent or how widespread the attribute under consideration is among the population under study in terms of percentages of the population who exhibit the attribute. The prevalence of HARSAD in this study therefore refers to the percentage of the population of study who exhibit the mechanisms of HARSAD.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter outlines the review of literature about HIV and AIDS related stigma and discrimination (HARSAD) against people living with HIV and AIDS (PLWHA) in healthcare settings. The review was in two parts, theoretical and empirical review.

2.1 Theoretical Review

Theoretical review is the aspect of literature review which focuses on theories, theoretical frameworks, constructs, operational definitions and operationalization of measurement instruments (Fung, 2017). Areas tackled in this theoretical review include:

- Theoretical development of the concepts of stigma and discrimination
- Stigma and discrimination related to HIV and AIDS
- Measurement of HARSAD
- Theories of HARSAD

2.1.1 Theoretical development of the concepts of stigma and discrimination

The concepts of stigma and discrimination have been discussed extensively by social scientists beginning from Erving Goffman whose foundational exposition on stigma has influenced many terminologies used in stigma and discrimination discourse. Other contemporary theorists have also helped to shape current understanding of stigma and discrimination related to HIV and AIDS.

In his “Notes on Management of Spoiled Identity”, Goffman (1963) explained the etymology of stigma as bodily signs or marks branded on a person to signify “something unusual and bad about the moral status” of the person and advertised that he or she was “a slave, a criminal, or a traitor – a blemished person, ritually polluted, to be avoided, especially in public places” (Goffman, 1963. P.1). Goffman’s idea of stigma involved deprivation of a person’s human dignity due to some socially frowned upon attribute which the person has, thereby marking the person out to be treated unjustly.

Goffman’s discourse on stigma points to the formation of stigma as a phenomenon involving labeling of persons perceived to have socially unaccepted or discredited attributes. Goffman used the term “the stigmatized” to refer to people with socially discredited attributes while referring to people without such attributes as “normal”. This implies that the stigmatized are considered as abnormal people. Through such derogatory labeling, discrimination against such people is legitimized and perpetuated. This is reflected in his statement that “we believe the person with a stigma is not quite human. On this assumption we exercise varieties of discrimination, through which we effectively, if often un-thinkingly, reduce his life chances” (Goffman, 1963. p.5)

Parker and Aggleton (2003) have expatiated on the concept of stigma as not a static individual attribute but rather as a social process used to maintain order in society by identifying deviants and using stigmatization and discrimination to exert social control over them. Thus the identification, differentiation, isolation and maltreatment of stigmatized people constitute a process of maintaining social dominance over them and thereby perpetuating inequality in society.

Link and Phelan (2001) posited similar views to that of Parker and Aggleton (2003) by stating that stigmatization involves the use of labeling, stereotyping, separation, status loss and discrimination by the powerful to exert control over those who deviate from the accepted social order. This brings into focus, two main groups of actors in the stigmatization process, the powerful dominant group which perpetrate the stigma and discrimination and the dominated group which are subjected to stigma and discrimination. These align with Goffman's label of "the normal" and "the stigmatized". The normal being the perpetrators or enactors of stigma and the stigmatized being the receivers or victims of stigma. This background understanding is important for this study as it helps to identify right from the onset which of these two groups is of interest in this study. The focus of this study is on nurses being the perpetrators of HIV and AIDS related stigma and discrimination against patients living with HIV and AIDS (PLWHA) for whom they provide nursing care.

To continue with Goffman's discourse on stigma, Goffman (1963) states that, of the normal people, there are those who are associated with the stigmatized through some form of close ties such as family relations, friendship or caregiving, who suffer what Goffman termed as "courtesy stigma". This refers to stigma that spreads from a stigmatized person to people close or related to them. This has also been referred to as associative stigma (Bos, Pryor, Reeder and Stutterheim, 2013) and has been commonly reported among nurses who care for PLWHA and has been a source of discouragement for nurses going into care of patients living with HIV and AIDS (Holzemer et al. 2007).

Also, Goffman uses the term “wise person” to refer to a normal person who, although is not member of a stigmatized group, accepts and sympathizes with them and is accepted by them also, as if he/she is one of their own (Goffman 1963. Pg. 28, 29). This usually results from having regular intimate dealings with members of the stigmatized group so that the person develops an understanding and accepting attitude towards them and does not discriminate against them as other people would. According to Goffman, “the wise” have a “stigmaphile” response while those who perpetrate stigma have a “stigmaphobic” response to the stigmatized. Goffman (1963) illustrates this by stating for example that, nurses and physical therapists can become “wise” from working with deformed patients who are stigmatized by their deformity. As a result of working with such patients, the nurses and physical therapists tend to understand them and become more accepting of them and reciprocally accepted by them than other members of the general population.

This reasoning is similarly extended by Allport (1958) in his social contact hypothesis which asserts that close interaction based on goodwill intentions in a helping or therapeutic relationship can help in reducing prejudice towards stigmatized people (Attel, 2013). Extending this reasoning to nurses caring for patients living with HIV and AIDS, it is expected that such nurses would become less prejudiced or ‘wise’ towards their patients who are living with HIV and AIDS, rather than exhibiting stigmatizing attitudes towards them. It therefore becomes worrisome when nurses working with PLWHA rather tend to be perpetrators of stigma against them. This is why this research was done to estimate the extent of this problem and find ways of eliminating it.

Goffman's exposition on stigma reveals several terminologies which are still relevant today and have shaped our understanding of concepts in the discourse on stigma and discrimination. However the conceptualization of stigma has evolved. Nowadays stigma means more than the visible physical mark on the person as posited by Goffman. According to Bos, Pryor, Reeder and Stutterheim, (2013), it encompasses the notion that the person is offensive or unacceptable. It is no more just the mark which is called stigma but rather, the negative ideas, perceptions, attitudes or behavior towards the person who has the mark or attribute or behaves in a way which is considered offensive or unacceptable (Bos, Pryor, Reeder and Stutterheim, 2013).

In other words, stigma goes beyond repulsion towards the mark, attribute or behavior to repulsion towards the person who exhibits the mark, attribute or behavior. The offensive attribute is not decoupled from the person but rather, the person is perceived the same way as his attribute. For instance, if smoking is considered offensive, the person who smokes is considered offensive. In the same vein, for an infection or disease such as HIV and AIDS which is considered as deadly, a person living with HIV and AIDS is perceived likewise as deadly leading to discrimination against them.

2.1.2 Stigma and Discrimination related to HIV and AIDS

In the context of HIV and AIDS, the attribute that is discredited is HIV infection and AIDS. Having HIV infection or AIDS is perceived as a negative attribute which marks or tarnishes the person who has it and reduces his human dignity. HIV and AIDS related stigma therefore involves the shame or disgrace that is attached to having HIV infection or AIDS and results in devaluing and discrimination against persons identified as having HIV infection or AIDS (NAM, 2017). According to Avert (2016), HIV and AIDS related stigma and discrimination (SAD) refers to “prejudice, negative attitudes and abuse directed at people living with HIV and AIDS”. Similarly, Herek (2002) defines it as “prejudice, discounting, discrediting, and discrimination directed at people perceived to have AIDS or HIV”.

Stigma against people living with HIV and AIDS is rooted in and fueled by the historical and unfortunately still enduring perception among some people that HIV and AIDS are conditions of deviants including sexually promiscuous people, prostitutes, men who have sex with men and injection drug users (Bos, Pryor, Reeder and Stutterheim, 2013). This perception is erroneous since it is established that HIV and AIDS is not a preserve of such perceived social deviants alone. For instance, healthcare providers may get infected with HIV through needle stick injuries and people may get infected through mother to child transmission as well (Wolf and Lo, 2001). However this wrong perception seems not go away and of course, it will not just go away unless it is consciously fought with appropriate interventions.

Goffman (1963) identified three types of stigma, firstly “the abominations of the body”, secondly “blemishes of individual character” and thirdly “tribal stigma of race, nation, and religion”. Abominations of body include physical disabilities and ailments such as blindness, deafness, leprosy and mental illness while blemishes of individual character include being a homosexual, use of illicit drugs and prostitution. The stigma associated with HIV and AIDS encompasses these two categories due to perceptions about HIV and AIDS not only as an abominable disease of the body but also associated with perceived deviant behavior or immoral character.

HIV and AIDS have a bad reputation as a deadly disease with dramatic physical signs of extreme emaciation and incapacitation in the late AIDS stages as well as a historical association with homosexuality as the first cases of AIDS were reported among homosexuals who were viewed as deviants and immoral persons (Avert, 2016). HIV and AIDS have also been associated with sexual promiscuity and illicit injection drug use (IDU). This makes it difficult to decouple the disease as a physical ailment from the deviant or immoral behaviors through which people are wrongly assumed to get infected.

HIV is not only transmitted through involvement in perceived deviant behaviors but also through mother to child transmission, blood transfusion and accidental needle prick injuries, just to mention a few (Hare, 2008). Nowadays transmission of HIV through blood transfusion is virtually eliminated due to prescreening of blood but it is still a risk factor nonetheless (Avert , 2016).

2.1.3 Measurement of HARSAD

What do researchers look for when they want to measure HARSAD? That is what this section of the literature review focuses on. Various indicators used in measuring HARSAD are reviewed. The section is then concluded with a description of the instrument used in measurement of HARSAD in this study.

It is generally recognized that parameters or indicators used in measuring HARSAD are too many as researchers attempting to measure HARSAD seem to haphazardly choose various indicators that fit their purpose in different countries, cultural contexts and study designs leading to confusion as to what really should be focused on when measuring HARSAD (Nyblade et al, 2005; Wolf et al 2006; Stangl, Brady and Fritz, 2017)

In a bid to define HARSAD indicators and create standardized quantitative measuring tools for HARSAD, the Stigma and Discrimination Indicator Working Group (SDIWG) was convened to develop and test HIV stigma indicators. They identified four key domains of HARSAD measurement including fear of casual transmission, value-and morality-related attitudes, enacted stigma and disclosure of HIV status (Nyblade et al, 2005; Wolf et al 2006).

Fear of casual transmission involves irrational fear of getting infected with HIV through casual contact and is manifested by refusal of contact with PLWHA. This could be assessed with statements describing fear of contact PLWHA to which respondents would rate their level of agreement or disagreement on a Likert Scale. An example of such statement is “I am afraid to sit next to someone who is showing signs of AIDS” (Nyblade et al, 2005; Wolf et al 2006).

Value-and morality-related attitudes include blaming, judging and shaming of PLWHA. This could be assessed with statements describing judgmental attitudes towards PLWHA to which respondents would rate their level of agreement or disagreement on a Likert Scale. An example of such statement is “I believe HIV/AIDS is a punishment for bad behavior” (Nyabblade et al, 2005; Wolf et al 2006).

Enacted stigma refers to overt behaviors comprising of biased actions and discrimination against PLWHA. Nyabblade et al (2005) argue that discrimination is distinct from other biased actions in that discrimination is legally prohibited and hence may be avoided by people in order not to be found culpable whereas other biased actions which have no legal proscriptions tend to be perpetrated freely without fear of falling foul to the law. An example of discrimination is refusal to give care to PLWHA. A HCW who perpetrates such acts is legally liable whereas a biased action such as caring for PLWHA in a separate ward room patients who don't have HIV and AIDS is not legally prohibited hence a HCW who perpetrates such act is not legally liable.

According to Nyabblade et al (2005) enacted stigma is difficult to assess accurately because it may be difficult for people to admit honestly that they have treated PLWHA badly especially in the case of discrimination where doing so would amount to admission of guilt of falling foul to law. This therefore leads to social desirability bias, a situation where respondents under-report their unacceptable behavior when responding to questions about their behavior (Nyabblade et al, 2005). This is a big limitation in assessing discrimination against PLWHA.

Stangl, Brady and Fritz (2017) have suggested stigma parameters that should be measured during stigma reduction intervention programmes. According to Stangl, Brady and Fritz (2017), stigma interventions programmes should target three key areas including drivers and facilitators of stigma, stigma ‘markings’ and stigma manifestations. According to Stangl, Brady and Fritz (2017), stigma parameters that could be measured when targeting drivers and facilitators of stigma include fear of infection through casual contact with PLHIV, social judgment, including shame, blame, prejudice and stereotypes and the legal and policy environment.

In addition, stigma parameters that could be measured when targeting manifestations of stigma include anticipated stigma, perceived stigma, internalized stigma, experienced stigma, discrimination and resilience. Stigma markings involve intersection of HIV stigma with other types of stigma such as sexuality stigma, drug use stigma and race stigma. Lastly Stigma parameters that could be measured when targeting stigma markings are the same as that of the manifestations of HIV stigma such as discrimination, shame and internalized stigma (Stangl, Brady and Fritz, 2017).

Uysa et al (2009) conducted a multi-phased mixed methods study to develop an instrument for measuring HIV stigma among nurses in five African countries including Lesotho, Malawi, South Africa, Swaziland and Tanzania. They first did a qualitative study to gather ideas for the indicators to use in the instrument. This enabled them to create a 46 item instrument. Series of testing of the instrument finally resulted in a 19-item instrument which they called the HIV/AIDS Stigma Instrument – Nurse (HASI-N). The HASI-N comprised of two parts, one part measuring stigma experienced by nurses and the other part measuring stigma perpetrated by nurses which could be used separately

depending on the interest of ones study. Stigma indicators contained in the part of the HASI-N which measured nurse perpetrated stigma included neglecting, fear of contagion, avoiding, negating and verbal abuse. In their discussion, Uysa et al (2009) stated that they actually started off with several indicators some of which were dropped during the series of testing at various phases of the study. Some of the initial stigma indicators that were later dropped included labeling, rejecting, pestering, abusing and gossiping.

Sullivan (2017) has identified six different scales for measuring HIV stigma enacted by healthcare workers (HCWs). These include The Provider Perception Inventory developed by Windsor et al (2013), A brief standardized tool for measuring HIV-related stigma among health facility staff developed by Nyblade et al (2013), The Stigmatizing Attitudes Toward People Living with HIV/AIDS Scale developed by Beaulieu et al. 2014 and The Health Care Provider HIV/AIDS Stigma Scale developed by Wagner et al (2014).

Marshall, Brewington, Allison, Haynes & Zaller (2017) also conducted a systematic review of studies which assessed HIV stigma among healthcare providers in the United States of America (U.S.A.) and identified four different HIV stigma scales used for quantitative assessment of HIV stigma among healthcare providers. These included the Schuster Scale which comes in two different versions including the HIV Stigma Scale and the HIV Stigma and Discrimination Scale. The HIV Stigma Scale assessed healthcare provider HIV stigma from patients' perspective while the HIV Stigma and Discrimination assessed it from healthcare providers' perspective. Their study reiterated the lack of a standardized measure of healthcare provider stigma. The need for a standardized HARSAD measuring instrument which could be accepted across continental regions if not universally cannot therefor be overemphasized.

2.1.4 The Healthcare Provider HIV/AIDS Stigma Scale (HPASS)

This study has adopted the Healthcare Provider HIV/AIDS Stigma Scale (HPASS) developed by Wagner, Hart, Mcshane, Margolese and Girard (2014) as the measuring instrument for HARSAD. The HPASS was developed to measure the three mechanisms of stigma, prejudice, stereotyping and discrimination posited by Earnshaw and Chaudoir in their HIV Stigma Framework (HSF).

The scale consists of 30 statements of which 13 measured prejudice, 11 measured stereotyping and 6 measured discrimination. The 30 statements are randomly mixed up and the respondent is expected to indicate their level of agreement or disagreement with each statement by choosing one option on a 6-point Likert Scale ranging from 1=strongly disagree to 6=strongly agree. Agreement indicate exhibition of HARSAD tendencies while disagreement indicate absence of HARSAD tendencies

In this study, a modified version of the HPASS is used and referred to as the modified HPASS (MHPASS). The MHPASS consist of 5 statements each selected from the prejudice, stereotypes and discrimination subscales of the HPASS and assessed on a 6point Likert scale.

2.1.5 Theories of HIV and AIDS related Stigma and Discrimination (SAD)

Various researchers have propounded several theories, conceptual frameworks and models to explain HIV and AIDS related stigma and discrimination (SAD). A review of some of these theories, frameworks and models is hereby outlined to identify relevant concepts from which to develop a unique conceptual framework for this study.

2.1.2.1 The HIV Stigma Framework (HSF)

The main theoretical base selected for this research is the HIV Stigma Framework (HSF). The HSF was developed by Earnshaw and Chaudoir (2009) to describe how HIV stigma is experienced by individuals who are infected with HIV and those who are not infected. The framework outlines mechanisms and impact of HIV stigma and what specific concepts should be defined and quantified when measuring HIV stigma among individuals. According to Earnshaw and Chaudoir (2009), the HSF is a process that begins with the assumption that HIV infection is a socially devalued ‘mark’ that elicits specific mechanisms which in turn lead to specific outcomes that impact people in society. The mechanisms of stigma and the outcomes of stigma are experienced differently by those who are infected with HIV and those who are not infected.

According to Earnshaw and Chaudoir (2009), mechanisms of stigma refer to the psychological responses elicited in the individual when they get to know that they are either infected or not infected with HIV. In this study, it is also referred to as the mechanisms of HARSAD. The mechanisms of stigma experienced by those who are infected with HIV include enacted stigma, anticipated stigma and internalized stigma. Enacted stigma is the degree to which the person believes they are currently experiencing

or have experienced prejudice and discrimination from others in the past. Anticipated stigma is the degree to which the person believes will experience prejudice and discrimination from others in the future and internalized stigma is the degree to which the person endorses and applies negative beliefs and feelings about people living with HIV to themselves. On the other hand, the mechanisms of stigma elicited in people who are not infected with HIV include prejudices, stereotypes and discrimination. Prejudices refer to negative emotions and feelings the person has towards PLHIV such as disgust, anger, and fear. Stereotypes refer to group-based beliefs about PLHIV that the person often imposes on an individual infected with HIV and discrimination refers to “behavioral expressions of prejudice” or unjust treatment the person perpetrates against PLHIV.

The outcomes of HIV stigma are the specific ways in which the mechanisms of HIV stigma impact the emotional, behavioral and physical wellbeing of people in society. As there are different mechanisms of stigma for those who are infected with HIV and those who are not infected, so are there different outcomes for those who are infected and those who are not infected. The extent of the mechanisms of stigma experienced or exhibited determines the outcome of the stigma experienced or exhibited. The extent of enacted, anticipated and internalized stigma experienced by those infected with HIV determines their mental health, their tendency to disclose their HIV status and their social support among others. On the other hand, the extent of prejudice, stereotypes and discrimination experienced or exhibited by people who are not infected with HIV determine their attitudes and behavior such as social distancing from people living with HIV, HIV testing behavior and policy support among others (Earnshaw & Chaudoir, 2009). The HSF has is shown diagrammatically in figure 2.1 below.

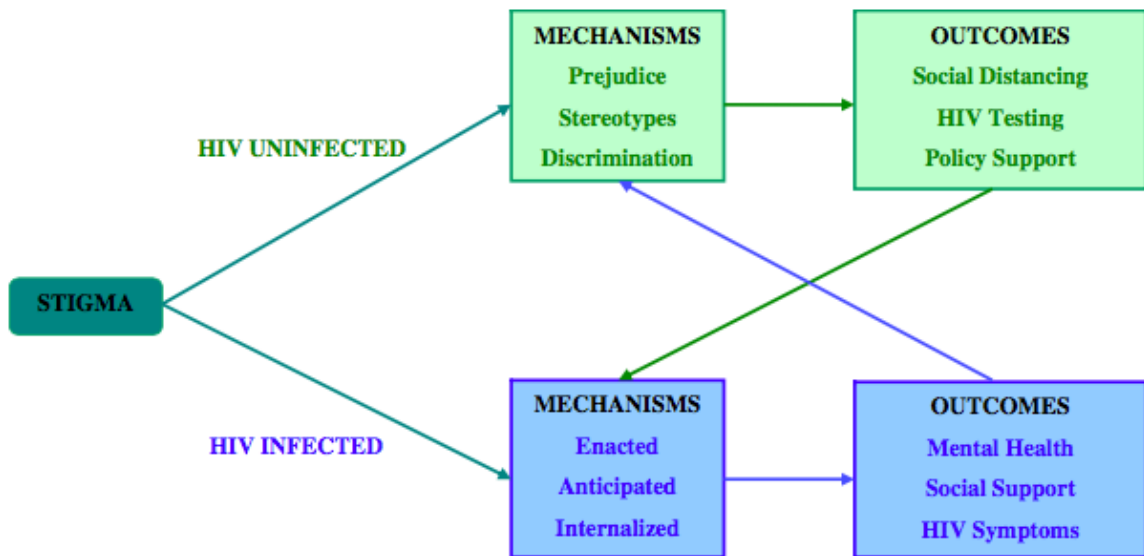


Figure 2.1: The HIV Stigma Framework

Source: Earnshaw and Chaudoir (2009)

From Figure 2.1 above, it can be seen that, Earnshaw and Chaudoir’s conceptualization of HIV stigma involves two parallel pathways of stigma, one for people infected with HIV (PIHIV) and the other for people uninfected with HIV (PUHIV). The pathway for PIHIV is experienced stigma while the pathway for PUHIV is exhibited or perpetrated stigma. Each of the pathways specifies the mechanisms of stigma and the outcome thereof among the specified group. The mechanisms of stigma among PUHIV are prejudice, stereotypes and discrimination exhibited towards people living with HIV and AIDS which impact behavioral outcomes such as social distancing, attitudes towards HIV testing and support for policies against HIV and AIDS among others. Parallely, the mechanisms of stigma among PIHIV are enacted stigma, anticipated stigma and internalized stigma which impact behavioral and health outcomes such as mental health,

disclosure of HIV status, manifestations of HIV symptoms and social support among others.

According to Earnshaw and Chaudoir (2009) the HSF provides a way for researchers to consider how the HIV stigma mechanisms and outcomes may be related. This is shown with arrows leading from the mechanisms to the outcomes along the two pathways and from the outcomes to the mechanisms across the two pathways. However, Earnshaw and Chaudior (2009) did not specify the nature of these relationships, whether causal or correlational. One of the objectives of this study was to find out the relationship between the prevalence of HIV stigma mechanisms (prejudice, stereotypes and discrimination) exhibited by nurses and the corresponding behavioral outcome of willingness to do HIV testing among them.

2.1.2.2 Social Contact Theory of HIV/AIDS Stigma

Attell (2013) has proposed application of Allport's (1958) Social Contact Theory (SCT) as a framework for understanding HIV and AIDS related stigma referred to as the Social Contact Theory of HIV/AIDS Stigma in this study. Gordon W. Allport (1958) propounded the social contact hypothesis which has now evolved into a theory in his work "The Nature of Prejudice" to explain the influence of social contact between members of different groups on intergroup prejudice.

Allport's (1958) social contact hypothesis posited that the level of interaction between members of two groups influences the extent of prejudice members of one group (in-group) have towards members of the other group (out-group). Allport (1958) discussed the influence of different levels of social contact including casual contacts,

acquaintances, residential contacts, occupational contacts and goodwill contacts on intergroup prejudice (Attell, 2013; Pettigrew, 1998; Allport, 1958). According to Allport (1958), under appropriate conditions, social contact can be a powerful way of reducing intergroup prejudice, conflict or hostility within specific situations. These conditions include equal group status within the situation, common goals, intergroup cooperation and the support of authorities, law, or custom (Pettigrew, 1998). Allport's hypothesis has become an established theory known as the Social Contact Theory or Intergroup Contact Theory with applicability to many facets of intergroup interactions and conflict reduction (Pettigrew & Hammann, 2011).

Attell (2013) is of the view that, although the Social Contact Theory was developed primarily to address racial prejudice, it could be applied as a framework for understanding HIV and AIDS stigma as well. In extending the social contact theory from a prejudice perspective to a stigma perspective to explain HIV and AIDS related stigma and discrimination, Attell (2013) hints at a possible relationship between stigma and prejudice but did not specify the sort of relationship between them (Attell, 2013; 17). Interestingly, it will be recalled from the HIV Stigma Framework already discussed that, in the view of Earnshaw and Chaudoir (2009), prejudice is considered as one of the three components of HIV and AIDS stigma. This reinforces Attel's (2013) idea about a possible relationship between stigma and prejudice.

According to Attell (2013) the formation of HIV and AIDS related stigma is a fluid process that evolves depending on the level of social contact that a person has with PLWHA. Attell (2013) cites Allport's (1958) levels of social contact including casual contacts, acquaintances, residential contacts, occupational contacts and goodwill contacts

as having similar effect on exhibition of HIV and AIDS related stigma as they have on interracial prejudice. Attell (2013) analyzes the various levels of social contact posited by Allport (1958) in relation to how they influence HIV and AIDS related stigma as follows:

Casual contact: This level of social contact involves perfunctory meetings without any meaningful interaction. Casual contacts are superficial, socially distant, have with no significant relationship and prone to increase prejudice (Attell, 2013; Allport, 1958). According to Attell (2013), the deficiency of significant interaction in casual contacts with PLWHA is similarly prone to increase HIV and AIDS related stigma.

Acquaintances: This level of social contact involve more significant interaction and formation of deeper relationships than casual contact and are likely to decrease prejudice (Attell, 2013; Allport, 1958). According to Attell (2013), the increasing levels of relationship in acquaintances can similarly decrease HIV and AIDS related stigma (Attell, 2013).

Residential contact: This level of social contact applies in residential arrangements where the different racial groups live in either segregated communities or in mixed up communities. Segregation leads to reduction in intergroup interaction hence increases prejudice while mixed up residential arrangements increases interaction which leads to decrease in prejudice (Pettigrew, 1998). According to Attell (2013), the residential contacts scenario does not apply in the case of HIV and AIDS related stigma as PLWHA are not segregated in special residential communities from people uninfected with HIV (PUHIV). It is however worthy to note that, in the healthcare setting, segregation of HIV and AIDS patients in specially designated HIV and AIDS wards, cubicles or beds in the

ward could produce the same effect as in segregated communities and therefore may lead to increase in stigma and discrimination against PLWHA in the healthcare setting. This however needs further research to be established.

Occupational contact: This level of social contact presents two possible outcomes. Firstly, the scenario where one group undertakes the menial jobs while the other group handles the higher status jobs presents a situation of inequality of status which decreases interaction between the two groups and thereby promotes prejudice. On the other hand, equal status collective work among the two groups offers opportunity for closer interaction which decreases prejudice (Attell, 2013; Allport, 1958). Extending this analysis to HIV and AIDS related stigma, a situation in which PLWHA occupy lower occupational or socioeconomic status compared to PUHIV decreases interaction between the two groups and thereby increases HIV and AIDS related stigma and discrimination against PLWHA. On the other hand, equal occupational or socioeconomic status between PLWHA and PUHIV enables closer interaction which will lead to reduction in stigma and discrimination against PLWHA. In addition, Attell (2013) asserts that different jobs expose individuals to different levels of contact with PLWHA hence could influence exhibition of HIV and AIDS related SAD against PLWHA. For instance, the work of healthcare providers exposes them to more interaction with PLWHA hence should lead to reduction in HIV and AIDS related stigma they exhibit towards PLWHA.

Goodwill Contact: This is the type of social contact that exists in helping relationships where one group works willingly to help reduce prejudice towards the other group (Attell, 2013; Allport, 1958). In extension to HIV and AIDS related stigma, goodwill contact is exemplified in the relationship between healthcare providers and PLWHA

where healthcare providers work as advocates for PLWHA. According to Attell (2013) this reduces HIV and AIDS related stigma only under circumstances of equal status between members of the two groups.

Bringing it all together, Attell (2013) presents Allport's (1958) concepts of casual contacts, acquaintances, occupational contacts, and goodwill contacts postulated in his social contact theory as a useful conceptual framework for examining the formation of HIV and AIDS related stigma as illustrated in the figure below.

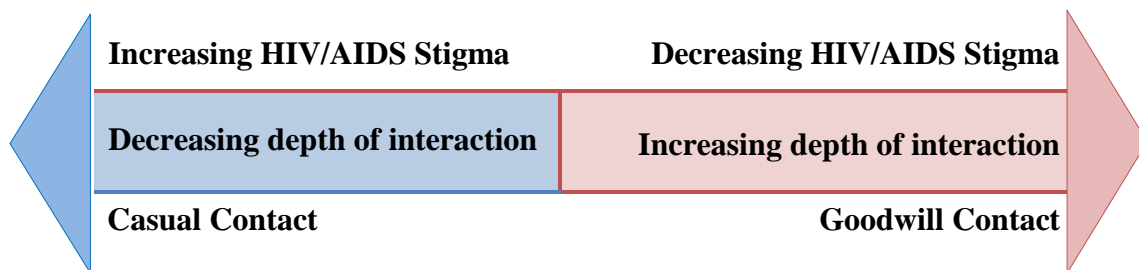


Figure 2.2: The Social Contact Theory (SCT) of HIV/AIDS Stigma

Figure 2.2 illustrates Attell's (2013) idea of HIV/AIDS stigma as a fluid process involving a continuum of different levels of social contacts. Casual contact and goodwill contact are at the extreme ends of the continuum. The level of HIV and AIDS related stigma a person exhibits towards PLWHA is high at the casual contact end of the continuum where the level of interaction is shallow. The level of stigma decreases as the level of interaction increases towards the goodwill end of the continuum.

In a nutshell, Attell (2013) has proposed social contact as a strong influencer of HIV and AIDS related SAD based on Allport's (1958) social contact theory, by stating that, the level of social contact that people uninfected with HIV (PUHIV) have with PLWHA

influences their formation of HIV and AIDS related stigma. The depth or closeness of interpersonal relationship a person has with PLWHA is inversely correlational to the level of HIV and AIDS related stigma they exhibit towards PLWHA.

2.1.2.3 The Conceptual Model of HIV/AIDS Stigma

In their work, “A conceptual model of HIV/AIDS stigma from five African countries”, Holzemer et al. (2007) present a conceptual model of HIV/AIDS Stigma based on a study among nurses and people living with HIV and AIDS (PLWHA) in African countries. Being from African origin and involving nurses, their model has particular relevance for this research on HIV and AIDS related SAD exhibited by nurses in Ghana.

The Conceptual Model of HIV/AIDS stigma (CMHAS) propounded by Holzemer et al. (2007) represents HIV/AIDS stigma as a process occurring within specific contexts. The process of HIV/AIDS stigma consists of four elements including triggers of stigma, stigmatizing behaviours, types of stigma and outcomes of stigma presented in a linear format suggesting a causal order. However according to Holzemer et al. (2007) the process is heuristic, iterative and interactive where outcomes become triggers.

According to Holzemer et al. (2007), triggers of stigma are actions that allow people to label themselves or others as HIV-positive and include HIV testing, diagnosis, disclosure, signs of disease and suspicion. These triggers lead to stigmatizing behaviors of varying levels of severity ranging from limited to serious discrimination against PLWHA that harm, isolate, exclude or identify them in a negative way. Types of stigma include received stigma perpetrated by PUHIV against PLWHA (including neglecting, fearing contagion, avoiding, rejecting, labeling, pestering, negating, abusing and gossiping)

internal stigma experienced by PLWHA (including perception of self, social withdrawal, self-exclusion and fear of disclosure) and associated stigma experienced by people who have a family member who is HIV-positive or work with people who are HIV-positive. Outcomes of stigma include poor general health (physical, social and mental wellbeing), violence, poor quality of life and reduced access to care.

The HIV/AIDS stigma process occurs within three contextual influences including the environment, healthcare system and different agents. The environmental context consists of culture, economics, politics, law and policies. The healthcare system context includes settings such as hospitals, clinics and home-based care settings and healthcare workers. The agents context include the person, family, community and workplace.

The Conceptual Model of HIV/AIDS stigma presented by Holzemer et al. (2007) incorporates previous concepts from several theorists including Parker and Aggleton (2003) who conceive stigma as a process underpinned by environmental, legal, political and individual context, Link and Phelan (2001). The relevant aspect of the model presented by Holzemer et al. (2007) for this study is the contextual influences of HARSAD. HARSAD exhibited by nurses towards PLWHA occurs within the context of the healthcare system. This aspect is incorporated into the conceptual framework for the study with the assumption that, nurses' perception of HARSAD in their healthcare facility could influence their perpetration of HARSAD.

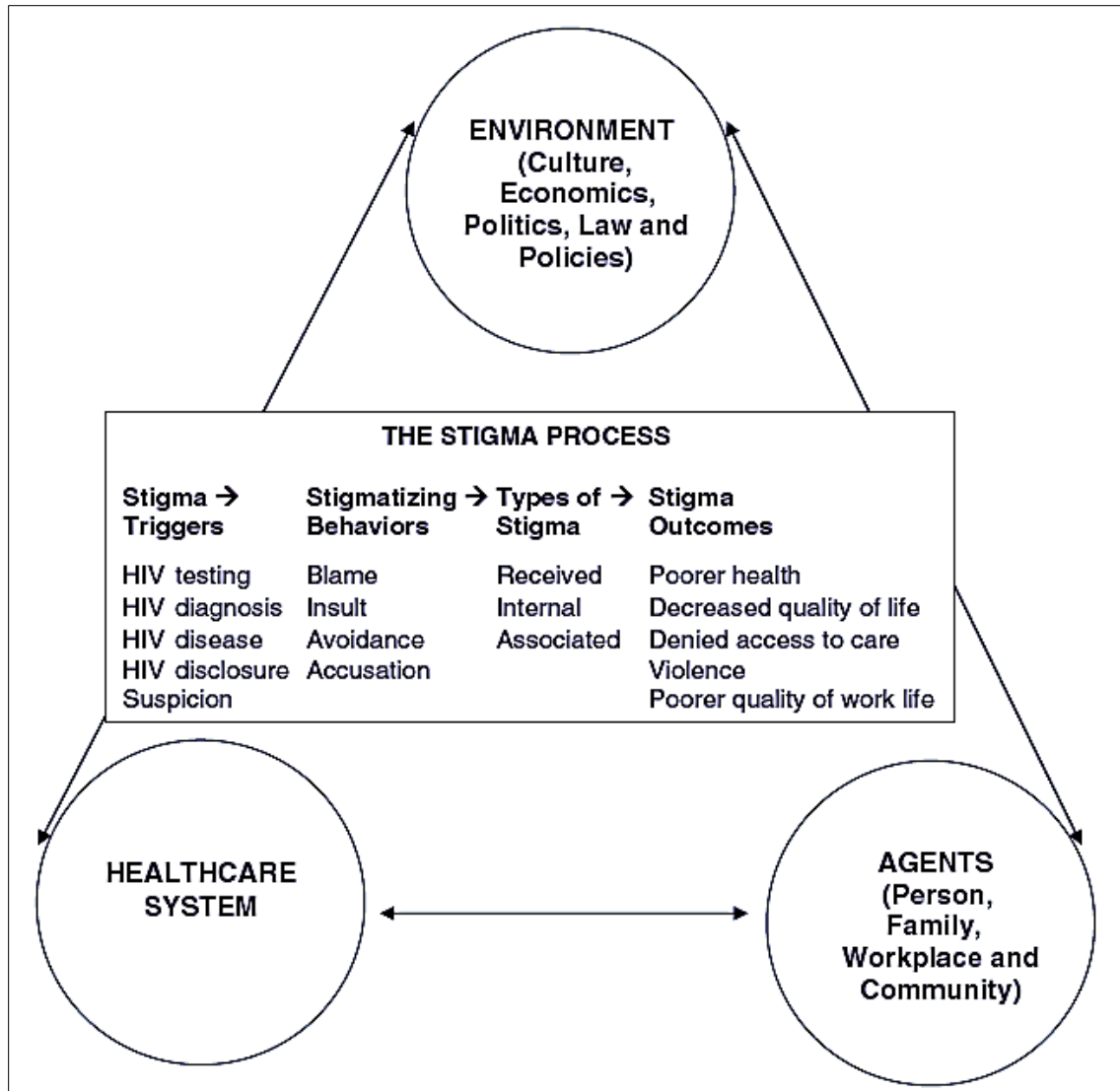


Figure 2.3: Model of the dynamics of HIV/AIDS stigma

Source: Holzemer et al. (2007)

Figure 2.3 illustrates the conceptual model of HIV/AIDS Stigma propounded by Holzemer et al. (2007) which outlines the dynamic process of HIV/AIDS stigma comprising of linear relationships between stigma triggers, behaviors, types and outcomes occurring within the contextual influences of the agent, healthcare system and the cultural, political, economic and legal environment.

Table 2.1: Summary of HIV/AIDS stigma theories reviewed

Theorist(s), Year and Country of Study	Name of Theory/ Framework/ Model	Category of People addressed by the Theory/Framework / Model	Main Concepts of the Theory/ Framework/ Model
Earnshaw and Chaudoir (2009) USA	HIV Stigma Framework (HSF)	People infected with HIV (PIHIV) and People Uninfected with HIV (PUHIV)	Mechanisms of Stigma Outcomes of Stigma
Attell (2013) based on Allport (1958) USA	Social Contact Theory (SCT) as a Framework for Understanding HIV/AIDS Stigma	People Living with HIV and AIDS (PLWHA) and People Uninfected with HIV (PUHIV)	Levels of Social Contact - Casual Contacts - Acquaintances - Occupational Contacts - Goodwill Contact Severity of Stigma
Holzemer et al. (2007) Lesotho, Malawi, South Africa, Swaziland and Tanzania.	Conceptual Model of HIV/AIDS Stigma (CMHAS)	People Living with HIV and AIDS (PLWHA) and People Uninfected with HIV (PUHIV) (Nurses and Volunteers)	Process of Stigma -Triggers of Stigma -Stigmatizing Behaviours -Types of Stigma -Outcomes of Stigma Contexts of Stigma -Environment -Healthcare system -Agent

The table 2.1 above shows a summary of the theories, frameworks and models reviewed so far specifying the name of the theorist(s), year of study and development of the theory, country of study or origin, name of the theory, framework or model, category of people addressed by the theory and the main concepts in the theory. Interestingly, it can be seen that all three theories address both people infected with HIV and people uninfected with HIV and the interactions among them.

Also, it can be seen from table 2.1 that both the HSF and the CMHAS address outcomes of stigma. However, whereas the HSF conceives HIV testing as an outcome of stigma, the CMHAS conceives it as a trigger or precursor of stigma instead. In addition, both the CMHAS and the SCT conceives of HARSAD manifested in different levels of severity ranging from limited or mild to severe. Also both the CHMAS and HSF address the types stigma experienced by PLWHA and those exhibited or perpetrated by people uninfected with HIV towards PLWHA.

Moreover, the fact that the study of Holzemer et al. (2007) from which the CMHAS was developed was done in African setting with nurses among the study population is significant as it ties in with the study setting and population of study for this research. It presents an opportunity to incorporate findings from Africa and among nurses into this study unlike the HSF and SCT originate from America. However, surprisingly none of the theories reviewed mentioned knowledge of HARSAD and its influence on how people experience or perpetrates HARSAD. This is of interest in this study and hence has been incorporated into the conceptual framework of the study.

2.2 Empirical Review

According to Fung (2017), empirical literature is the aspect of literature review which concentrates on previous research findings which the researcher wants to compare his findings with. It involves description of the methodology and findings of various studies with that addressed similar objectives as the study objectives which include:

- Measurement of the prevalence of HARSAD among nurses
- Demographic, professional characteristics and work experiences of nurses which influence their perpetration of HARSAD
- Knowledge of HARSAD and its influence on perpetration of HARSAD
- Relationship between HIV testing and the mechanisms of HARSAD

2.2.1 Measurement of prevalence of HARSAD among nurses

Prevalence is a statistical measure indicating the proportion of a population who exhibit a specific characteristic under consideration in a given time. Estimates of prevalence may be affected by several methodological factors such as the population covered, sample size and sampling technique, instrument used, mode and timing of data collection and analysis method. Methodological differences may therefore lead to differences in prevalence results and affect comparisons between studies (NIH, 2017). Literature reviewed shows that different researchers have used various designs and stigma scales to estimate prevalence of HIV and AIDS related SAD among their study population. Those reviewed and found relevant to this study include Sullivan (2015), Doka, Danjin and Dongs (2017), Alan (2017), Hossain and Kippax (2010), Harapan, et al. (2013) and Eo (2011)

2.2.1.1 Sullivan's study of prevalence of HARSAD in Canada

Sullivan (2015) did a quantitative study in which he used the Healthcare Provider HIV/AIDS Stigma Scale (HPASS) to measure prevalence of HARSAD among healthcare workers (HCWs) in Canada. He used the original 30-item questionnaire of which 13 items assessed prejudices, 11 items assessed stereotyping and 6 items assessed discrimination on 6-point Likert Scales ranging from 1=strongly disagree to 6=strongly agree. His study population included 101 nurses, 24 physicians, 10 mid-level providers (nurse practitioners and physician's assistants), 48 allied-clinical staff and 59 allied-non-clinical staff who answered the questionnaire in an online survey.

Data was analyzed with Statistical Package for Social Sciences (SPSS) software. Prevalence of stigma mechanisms was estimated by calculating the mean of the responses for each of the sub-scales as well as the whole scale. High mean scores indicated high prevalence of HARSAD and vice-versa. Among nurses in particular, the result indicated a mean score of 26.03 for stereotyping, 30.03 for discrimination and 12.82 for prejudice. Stereotyping was demonstrated across all the different groups of HCWs with 6 of 11 items being positive in the stereotyping subscale displaying mean scores >3.0.

This approach used by Sullivan ((2015) is being replicated in this study but with a modified version of the HPASS (MHPASS) comprising of 5 items selected from each of the three subscales making a total of 15 items. Prevalence of HARSAD is being estimated with mean scores as well as calculation of percentage of those who agree with the statements on the scale to obtain percentage prevalence of HARSAD among the population n the three subscales as well as the whole scale.

2.2.1.2 Doka and Colleagues' study of prevalence of HARSAD in Northern Nigeria

Doka, Danjin and Dongs (2017) studied prevalence of HARSAD tendencies among health-care providers in a tertiary health facility in Northern Nigeria. Using exploratory descriptive cross-sectional survey design, they used quota sampling technique to select 201 HCWs including 121 nurses, 18 doctors, 7 pharmacists, 17 laboratory workers, 33 from allied professions, and 5 dentists and administered a structured questionnaire to them. HIV stigma indicators including shaming, blaming and avoidance were assessed with statements describing such dispositions, attitudes and behaviors towards PLWHA. Each statement was rated on a 3-points Likert Scale including agree, disagree and neutral. Data was analyzed with Microsoft Excel and SPSS. Prevalence of HARSAD was estimated by calculating the percentage of respondents who agreed with the statements implying endorsement of HARSAD dispositions, attitudes and behaviors towards PLWHA. The results showed 15% prevalence of HARSAD among the study population as a whole 14.2% among nurses in particular.

The approach used by Doka, Danjin and Dongs (2017) is similar to that being used in this study. The difference is in the framing of the statements in the questionnaire being used to assess HARSAD, although they assess basically the same indicators of HARSAD. Whereas, the instrument used by Doka, Danjin and Dongs (2017) bundles all the statement together into a single measure of HARSAD, the MHPASS being used for this study categories the statements under three distinct subscales making up the three mechanisms of HARSAD comprising of prejudice, stereotypes and discrimination.

2.2.1.3 Alan's study of prevalence of HARSAD in Turkey

Allan (2017) did a quantitative study of prevalence of HARSAD using an instrument known as the AIDS Attitude Scale (AAS). He estimated and compared prevalence of AIDS attitudes of first and fourth year nursing students in Turkey. The AAS assessed for three dimensions of AIDS attitudes including fear of contagion, negative feelings and professional resistance. It consisted of 15 grouped items of which five items (1-5) assessed fear of contagion, four items (6-9) assessed negative feelings and six items (10-15) assessed professional resistance. The scale had a test-retest coefficient of $r=0.92$ and the internal consistency coefficient of $\mu =0.86$. Each item was rated by the respondent on a 6-point Likert Scale ranging from “I totally do not disagree” (1) to “I totally agree” (6). Study participants included 136 first graders and 77 fourth graders selected randomly.

Data analysis involved descriptive statistics generated with SPSS. Points were allocated to the items in each sub-scale as follows: fear of contagion (items 1-5; points: 5-30), negative feelings (items 6-9, points: 4-24), and professional resistance (items 10-15, points: 6-36). The attitude score was obtained by adding the points from the fifteen items. High points obtained from the scale and its sub-dimensions indicated a negative attitude towards individuals with AIDS.

The result indicated that among the 136 first year nursing students, mean scores were 19.40 for fear of contagion, 12.44 for negative feelings and 15.01 for professional resistance were respectively while that of the fourth year students were 16.76 for fear of contagion, 12.15 for negative feelings and 14.93 for professional resistance.

2.2.1.4 Hossain and Kippax's study of prevalence of HARSAD in Bangladesh

Hossain and Kippax (2010) conducted a quantitative study of HIV-related Discriminatory Attitudes of Healthcare Workers (HCWs) in Bangladesh with the aim of identifying the level of HIV-related discriminatory attitudes and related factors among them. They used the cross sectional survey design with purposive sampling of 526 HCWs from whom they collected data with a structured questionnaire.

Data collected included sociodemographic and religious characteristics, contact with HIV-positive people in the workplace, knowledge about HIV and AIDS, irrational fear about transmission of HIV and discriminatory attitudes. Discriminatory attitudes was measured on a 16-items scale five-point Likert scales ranging from 1=disagree strongly to 5=strongly agree. Exhibition of discriminatory attitudes was indicated by agreement with the statements on the scale. Knowledge of HIV was measured with a 10-item instrument with three answer options and irrational fear of HIV transmission was measured a 12-item instruments with three answer options.

Descriptive statistics was used in data analysis and the results indicated that there was a moderate level of discriminatory attitudes among the study population. Hossain and Kippax (2010) did not specify a percentage prevalence of discriminatory attitudes on the whole discrimination scale but cited an instance 47.9% of the responded agreed with the one of the discriminatory statement.

2.2.1.5 Harapan and Colleagues' Study of Prevalence of HARSAD in Indonesia

Harapan et al. (2013) replicated the study which Hossain and Kippax (2011) did as already reviewed among health care workers (HCWs) in Indonesia. Their aim was to assess the level of stigmatized and discriminatory attitudes the HCWs exhibited towards people living with HIV (PLHIV) in Indonesia.

They used the same design, sampling technique, instrument and data analysis technique as used by Hossain and Kippax (2011). The study design was cross-sectional survey with purposive sampling of 89 HCWs consisting of 18 doctors, 24 nurses and 47 medical student interns. The adopted research instrument was a structured questionnaire comprising of 10 items which tested knowledge on HIV transmission and prevention, 12 items which tested irrational fear of HIV transmission and 15 items which assessed stigmatized attitudes on a 5-point Likert scale. Other variables collected age, sex, education, and religion, importance of religion in the HCW's life, marital status, type of HCW and having direct contact with PLHIV.

Mean scores were used to estimate stigmatized attitudes and discriminatory attitudes. Harapan, et al. (2013) did not state the percentage prevalence of stigmatized and discriminatory attitudes but indicated that the mean score for stigmatized attitudes was 35.5 while that for discriminatory attitudes was 38.8.

The interesting thing about this study is that, it was a replication of a study originally done by researchers in Bangladesh, in a different country Indonesia. Also stigma is assessed separately from discrimination. This approach is similarly used in this study which separate HARSAD into prejudice, stereotypes and discrimination.

2.2.1.6 Eo's study of Prevalence of HRASAD in Nasarawa State, Nigeria

Eo (2011) did a study of stigmatizing attitude and practice among the healthcare workers in Nasarawa State, Northern Nigeria. The study was cross-sectional in design with the use of multistage sampling technique to select and interview 421 health workers with a structured questionnaire which collected data on demographic characteristics, HIV related stigmatization attitude and practice; and ethical and psychological issue. HIV related stigmatization attitude and practice was assessed. The section which assessed discriminatory attitudes comprised of 5 items assessed on 5 point Likert scale.

Data analysis involved descriptive statistics generated with SPSS. Calculations of median scores were used to estimate levels of stigma. Percentage prevalence of stigma was not stated but the result indicated that in terms of discriminatory practices, 97.1% of the respondents believed that patients living with AIDS should be segregated in different wards from other patients, 1.7% had given patients confidential information to their relatives without their consent in the last 6 months and 96.7% had divulged such to other health care providers involved in their management. It is important to note the finding that 46.1% of the HCWs studied did not know their HIV status.

In summary, the six studies reviewed so far show that cross sectional survey designs were mostly used in the study of HARSAD prevalence with structured questionnaire which assessed respondents' self-reported feelings, thoughts and behavior towards PLWHA expressed as levels of agreement or disagreement with statement which assessed HARSAD various indicators Agreement indicated existence of HARSAD tendencies. Prevalence of HARSAD was mostly estimated with mean scores and sometimes with calculation of percentages as done in this study.

2.2.2. Demographic, professional characteristics and work experiences of nurses which influence their perpetration of HARSAD.

Studies of prevalence of HARSAD mostly examine how HARSAD varies with different personal characteristics of their respondents as well. The relationship between HARSAD and personal characteristics are usually tested with various types of bivariate analyses with statistical significance set at the conventional value of $p \leq 0.05$. This section reviews some of the results of the bivariate analysis between HARSAD and demographic, professional characteristics and work experiences with PLWHA from the studies already reviewed in the previous section.

In the study of Sullivan (2015), the relationship between HARSAD and personal characteristics was examined with analysis of variance (ANOVA). The results indicated that statistically significant negative correlation was found between prejudice and occupational grade such that as occupation grade decreased, measures of significance for prejudice increased. This study also examined nursing rank against HARSAD.

Doka, Danjin and Dongs (2017) examined how a key anti-stigma variable varied across personal characteristics of their respondents using Chi-Square analysis and found that no significant relationship was observed with sex, religion and educational qualification. This study also examined gender and educational qualification against HARSAD.

In the study of Hossain and Kippax (2010) variations in discriminatory attitudes with various characteristics was examined with ANOVA and multiple linear regression model. It was found that, level of discriminatory attitudes increased with male gender, age, importance of religion and irrational fear about transmission of HIV. It however

decreased with higher educational qualification, and greater knowledge of transmission and prevention of HIV. This study also examined the influence of gender, educational qualification and knowledge of HARSAD on perpetration of HARSAD.

In the study of Harapan, et al. (2013), ANOVA showed statistically significant differences in education, marital status and type of HCW for stigmatized attitudes and statistically significant differences in marital status and type of HCW for discriminatory attitudes. Multiple linear regression analysis was used to identify the predictor variables for stigmatized and discriminatory attitudes. It was found that, age was positively related to discriminatory attitudes but had no significant correlation with stigmatized attitudes. Sex had no correlation with discriminatory attitudes nor stigmatized attitudes. Irrational fear of HIV transmission had significant direct correlation with stigmatized attitudes and discriminatory attitudes. Knowledge on transmission and prevention of HIV had significant direct correlation stigmatized attitudes and discriminatory attitudes. This study also examined the influence of educational qualification and knowledge of HARSAD on perpetration of HARSAD.

In the study of Eo (2011), Chi-square tests and logistic regression model were used to examine relationships between variables. Results on the predictor variables showed factors that were not significantly related to stigmatizing attitudes included sex, knowledge of the National Workplace HIV Policy and recent training in infection control practices. Working in a tertiary hospital was however found to be a significant direct predictor of stigmatizing attitudes.

2.2.3 Relationship between knowledge of HARSAD and perpetration of HARSAD

Many studies that examined the influence of knowledge of HIV and AIDS on HIV stigma attitudes focused on general knowledge of transmission and prevention of HIV and AIDS. However this study was interested specifically in knowledge of HARSAD and its influence on HARSAD perpetration among healthcare providers, particularly nurses. There seems to be paucity of literature on HARSAD knowledge among healthcare workers and a rather excessive focus on knowledge of HIV transmission and prevention.

2.2.3.1 Okumu and Colleagues' study of HIV knowledge, HIV testing and HIV Stigma.

Okumu et al. (2017) examined how HIV knowledge and HIV-related stigma impact HIV testing experience. They used cross-sectional survey design and collected data through audio computer-assisted self-interviews questionnaires. Their study population consisted of Black young adults aged 18–30 years with sample size of 508.

They tested HIV Knowledge with an eight item test with “yes,” “no,” and “refuse to answer” responses and marked the correct answers to obtain knowledge scores. HIV stigma attitudes was assessed with an adopted thirteen items scale known as the AIDS-Related Stigma Scales which tested attitudes towards PLWHA and internalized stigma on 4 point Likert Scales. HIV testing was determined by asking participants if they had ever tested for HIV as well as their intention to test within a year.

They analyzed data with SPSS version 17. Descriptive statistics result indicated that 87% had tested for HIV. They used logistic regression to analyze the scores on the three variables and found that having ever tested for HIV had a statistically significant positive correlation with HIV knowledge and statistically significant inverse correlation with low

HIV-related stigma. However, there were no significant relationships between HIV-related stigma, HIV knowledge, and intention-to test for HIV in the future. They concluded that reducing HIV-related stigma and increasing HIV knowledge are not sufficient in promoting HIV testing.

2.2.3.2 Chew and Cheong's study of HIV knowledge and stigmatizing attitudes among medical students in Malaysia

Chew and Cheong (2012) conducted a cross sectional survey among medical students in Malaysia to determine factors associated with knowledge on HIV/AIDS and stigma towards PLWHA. They did a comparative study of 170 pre-clinical and 170 clinical-year students selected through stratified random sampling.

HIV/AIDS knowledge was assessed with a 6-item instrument with questions about transmission of HIV and true or false responses while stigmatizing attitudes was assessed with a 9-item instrument with three subscales of which three items attitudes of blame/judgment, four items assessed attitudes toward imposed measures and two items assessed comfortableness dealing with HIV/AIDS patients all on a 5-point Likert scale.

Data was analyzed with SPSS version 19 with generation of descriptive statistics for responses and multiple linear regression used to examine the predictors for stigmatizing attitudes. The results indicated that knowledge scores did not correlate with stigmatizing attitude nor any of the socio-demographic characteristics among the respondents. There was higher knowledge scores among those who had previous encounters with PLWHA. Academic year, previous encounter with PLWHA and ethnicity were found to be significant predictors of stigmatizing attitudes.

The paucity of studies on healthcare providers' knowledge of HARSAD suggests that, it may have been taken for granted that healthcare workers know what HARSAD is and should be able to recognize it. However according to Health Policy Initiative (2010) healthcare workers may sometimes have insufficient awareness of what stigma looks like and its consequences and may not recognize the implication of their actions as stigmatizing and discriminating towards PLWHA.

2.2.4 Relationship between HIV testing and Mechanisms of Stigma

Earnshaw and Chaudior (2011) posited that there is a relationship between the mechanisms of HIV stigma and the outcome of HIV stigma in their HIV Stigma Framework (HSF). They cited HIV testing as one of the outcomes of HIV stigma but did not specify the relationship between the mechanism of HIV stigma and HIV testing. This study intended to examine the kind of relationship between HIV testing and the mechanisms of HARSAD exhibited by the nurses under study. Literature was therefore reviewed to find out the relationship between HIV testing and HIV stigma.

Chesney and Smith (1999) have discussed the effect of stigma on HIV testing from several studies. Based on findings from various studies, they concluded that “the stigmatizing nature of HIV and AIDS is a factor that that delayed HIV testing among at risk persons” Chesney and Smith (1999, p.1163). Some of the findings they cited included, the preference for anonymous (which involve no keeping of personal records) to confidential testing which (involve keeping of patient records) due to fear of stigma, avoidance of testing due to fear that the results might jeopardize one's relationship with their significant others and fear of discrimination when people get become aware of having undergone HIV testing.

Young and Bendavid (2010) explored the relationship between HIV testing, stigma, and health service usage in USA by analyzing retrospective nationally representative data obtained from the 1993–1997 National Hospital Ambulatory Medical Care Survey (NHAMCS). They analyzed the usage of non-stigmatized services such as spirometry and allergy testing, in comparison with HIV testing. They found that people visiting hospital for HIV testing tended to cover it up with additional requests for other non-stigmatized services which were completely unrelated to HIV services as a strategy of covering up their use of HIV testing services. This led to the conclusion that stigma affects HIV testing decision and behavior.

Koku (2011) conducted a study of the effect of stigma on desire for HIV tests in Ghana. He analyzed retrospective data obtained from the 2003 Ghana Demographic and Health Survey (GDHS). He focused his data analysis on personal stigma towards HIV and HIV testing behaviors among men and women who had been sexually active in the last 12 months. Desire for HIV testing was assessed from respondents' answers to the question of whether they wanted to do HIV testing or not. Personal stigma was assessed from responses to questions about willingness to keep a family member's HIV infection a secret, willingness to care for a relative who is infected with HIV and willingness to buy vegetable from a PLWHA among others. Data was analyzed using STATA software. Descriptive statistics including percentages, Chi-squares and regression models were generated to explain the responses. The outcome variable was willingness to do HIV test while the predictor variables included socio-demographic, sexual risk, HIV knowledge and stigma towards HIV among others. The analysis was done separately for males and females. Koku (2011) found that about two-thirds of the respondents exhibited high

levels of personal stigma towards HIV. The result showed that men who knew someone who had HIV or died of AIDS were less likely to desire HIV testing. This implied a significant negative correlation between HIV testing and personal stigma towards HIV.

The reviews so far has focused on HIV testing and HIV stigma among the general population. This study was however interested in HIV testing among healthcare workers, particularly, nurses and from the perspective of the nurses being the enactors of stigma against PLWHA. In a literature review conducted by Mavedzenge, Baggaley, Lo and Corbett (2011), it was found that barriers to HIV testing among healthcare workers included observed stigmatization of patients by colleagues, observed discrimination against HIV positive colleagues, lack of knowledge or confidence in HIV anti-discrimination legislation, personally knowing HIV test provider, and heightened sense of shame and tendency to self-stigmatize because of HIV status.

In a nutshell, the literature reviewed so far reveals that HIV testing among PUHIV correlate negatively with their perpetuation of HARSAD against PLWHA. This implies that HIV testing among nurses is likely to be low among nurses when there is high prevalence of HARSAD perpetration against PLWHA among them.

2.3 Conceptual Framework of the Study

Conceptual framework refers to the researcher's map for explaining the relationships between the variables in his study. It is synthesized from previous knowledge obtained through literature review and the researcher's personal observations of the subject of research (Regioniel, 2015). The conceptual framework for the study is shown below.

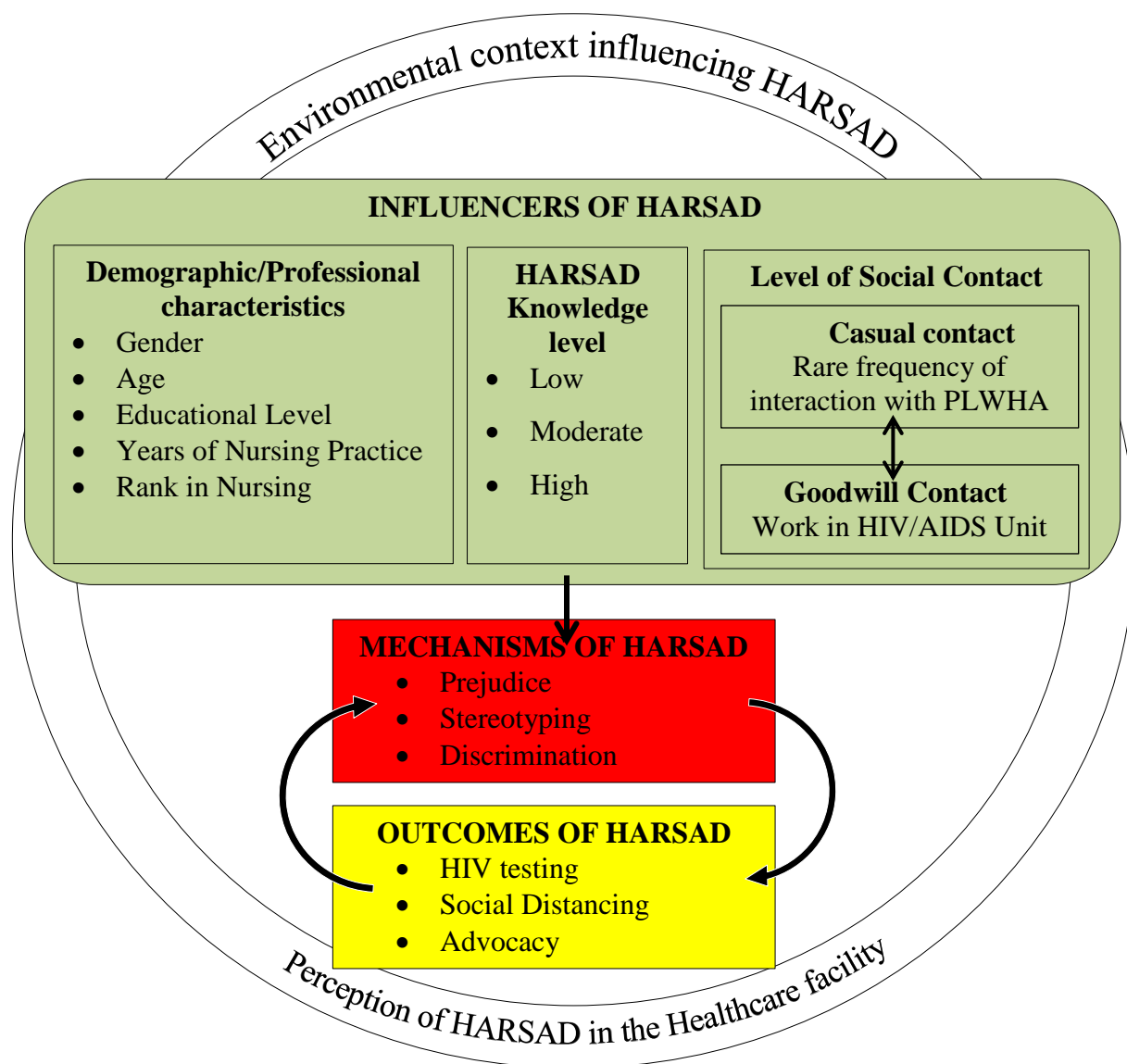


Figure 2.4: Conceptual framework for the study adapted from Earnshaw and Chaudoir (2009), Holzemer et al. (2007) and Attel (2013)

Figure 2.4 shows the conceptual framework for this study adapted from Earnshaw and Chaudoir (2009), Holzemer et al. (2007) and Attel (2013). It represents HARSAD exhibited by people uninfected with HIV (PUHIV), such as nurses towards people or patients living with HIV and AIDS (PLWHA). The framework is synthesized from a combination of relevant concepts from the three theories of HIV and AIDS stigma reviewed. The conceptual framework has the following components:

1. Influencers of HARSAD: The influencers of HARSAD are the factors that influence the level of HARSAD exhibited by nurses towards patients living with HIV and AIDS (PLWHA). The influencers of HARSAD examined in this study include:
 - a. Demographic characteristics including age, gender and educational level and professional characteristics including years of nursing practice and rank in the professional nursing hierarchy.
 - b. Knowledge of HARSAD ranging from low knowledge level, moderate knowledge level and high knowledge level.
 - c. Level of Social Contact with PLWHA: This is adapted from the social contact theory of HIV/AIDS stigma posited by Attel (2013). Casual contact involves rare contact with PLWHA while goodwill contact involves working in HIV/AIDS units or wards where there is more frequent therapeutic interaction with PLWHA.
 - d. Environmental Context (Healthcare facility): This is adapted from the Conceptual Model of HIV/AIDS Stigma (CMHAS) posited by Holzemer et al. (2007). The environmental context in which HARSAD exhibited by nurses is being examined in this study is the healthcare facility

2. Mechanisms of HARSAD: This is adapted from the HIV stigma Framework (HSF) posited by Earnshaw and Chaudoir (2009). The mechanisms of HARSAD exhibited by nurses towards patients living with HIV and AIDS (PLWHA) include prejudice, stereotypes and discrimination.
3. Outcomes of HARSAD: This is adapted from the HIV stigma Framework (HSF) posited by Earnshaw and Chaudoir (2009). The outcomes of HARSAD include HIV testing, social distancing and advocacy. Advocacy is being added as an outcome of HARSAD because HARSAD exhibited by nurses could influence their advocacy role on behalf of PLWHA.

The conceptual framework is underpinned by the following assumptions:

1. HARSAD exhibited by people uninfected with HIV PUHIV (i.e. nurses) towards PLWHA is a dynamic process involving three major concepts including influencers of HARSAD, mechanisms of HARSAD and outcomes of HARSAD.
2. The relationships among the three major concepts involve linear relationships. The influencers of HARSAD impact on the mechanisms of HARSAD. The mechanisms of HARSAD in turn impact on the outcomes of stigma. The outcomes of HRASAD have reciprocal impact on the mechanisms of stigma.
3. The process of HARSAD exhibited by nurses towards patients living with HIV and AIDS occurs within the environmental context of the healthcare facility. The nurses' perception of HARSAD in their healthcare facility could influence their perpetration of HARSAD against PLWHA.

2.3.1 Linkages between the Conceptual Framework, Study Objectives and the Research Instrument

According to Regioniel (2015), conceptual frameworks enable researchers to explain the relationships between the variables in their study and answer their research questions in line with the objectives of the study. The conceptual framework of the study was aligned with the study objectives and guided the development of the questions used in the research instrument. The research instrument was a structured questionnaire.

Section A of the questionnaire collected data on the demographic characteristics (age, gender and educational qualification), professional (nursing rank, number of years of practicing nursing) and level of social contact with PLWHA (experience of work in HIV/AIDS units and frequency of interaction with PLWHA at work). These variables correspond to the influencers of HARSAD in the conceptual framework and objective 2 of the study. In addition, section A collected data about HIV testing history and willingness which correspond to the outcome of HARSAD in the conceptual framework. This was analyzed to determine the relationship between HIV testing and the mechanisms of HARSAD in line with objective 4 of the study.

Section B of the questionnaire collected data about the knowledge of HARSAD. Knowledge was considered as one of the influencers of HARSAD in the conceptual framework and corresponded to objective 3 of the study. Section C of the questionnaire was the modified Health Provider HIV/AIDS Stigma Scale (MHPASS) which assessed HARSAD tendencies. Scores on the scales were used in calculating HARSAD prevalence in line with objective 1 of the study.

2.4 Summary of Literature Review

The review of literature for the study comprised of theoretical review and empirical review. Theoretical review spanned the theoretical development of the concept of stigma and discrimination, HIV and AIDS related stigma and discrimination (HARSAD), measurement of HARSAD and theories of HARSAD. Empirical review described the methodologies and findings of previous studies on HARSAD against PLWHA exhibited by healthcare providers, particularly nurses.

The review of the theoretical development of the concepts of stigma and discrimination highlighted Goffman's thesis on stigma as well as the opinions of contemporary theorists such as Link and Phelan (2001) and Parker and Aggleton (2003). While Goffman highlighted stigma as a mark imposed by society on people with deeply discredited attributes, contemporary theorists highlighted it as a social process involving power, dominance and control of people perceived as social deviants as a way of maintaining social order and perpetuation of social inequality. Stigma and discrimination related to HIV and AIDS was found to be rooted in the perception of HIV infection as a deadly contagion caused by deviant practices such as sexual promiscuity leading to shunning of PLWHA and unjust treatment such as denial of care by health care providers.

Review of the measurement of HARSAD highlighted major parameters and indicators which are assessed during measurement of HARSAD. Conceptual parameters and indicators identified for measurement included shaming, blaming, fear of contagion, stereotypes, prejudice and discrimination among others. This study adopted the Health Provider HIV/AIDS Stigma Scale (HPASS) developed by Wagner, Hart, Mcshane, Margolese and Girard (2014) and modified it measure HARSAD in this study.

The main theoretical basis used for the study was the HIV Stigma Framework proposed by Earnshaw and Chaudoir (2009) which conceptualized HIV stigma as a process involving two pathways, one for people infected with HIV (PIHIV) and the other for people uninfected with HIV (PUHIV). This study focused on only the pathway for PUHIV which involve perpetration of stigma against PLWHA. This pathway is characterized by three mechanisms of stigma including prejudice, stereotypes and discrimination. These mechanisms lead to various outcomes such as impact on HIV testing. In addition to this framework, relevant concepts from social contact theory of HIV stigma proposed by Attel (2013) and the Conceptual Model of HIV/AIDS stigma (CMHAS) propounded by Holzemer et al. (2007) were adopted and combined to synthesize a conceptual framework for the study.

The review of previous studies has revealed that, measurement of HARSAD prevalence among various populations usually involve the use of various types of HIV/AIDS stigma scales. The scales usually utilize Likert Scale formats involving various degrees of agreement and disagreement with statements depicting HARSAD tendencies. Mean scores on the scales represent the degree of HARSAD tendencies exhibited. Higher scores usually depict higher degrees of HARSAD tendencies while lower scores depict lower degrees of HARSAD tendencies. Data analysis usually involves the scores on the scale being used as the outcome variable while various attributes among the population are used as predictor variables. HARSAD scores are usually analyzed against predictors such as sociodemographic characteristics, knowledge and HIV testing. The multiplicity of HARSAD scales draws attention to the need for development of standardized scales for measurement of HARSAD among various populations.

The conceptual framework for the study was developed from the three theories of HIV stigma reviewed. It was based on the assumptions that HARSAD exhibited by nurses against PLWHA is a process involving three main concepts including influencers of HARSAD, mechanisms of HARSAD and outcomes of HARSAD. The influencers of stigma include nurses' demographic and professional characteristics, level of social contact with PLWHA, knowledge of HARSAD and the environmental context HARSAD in the healthcare facility. The mechanisms of HARSAD include prejudice, stereotypes and discrimination and the outcomes of HARSAD include HIV testing, social distancing and advocacy. These three concepts are related such that, the influencers impact on the mechanisms, the mechanisms in turn impact on the outcomes and the outcomes reciprocally impact on the mechanisms.

The knowledge obtained from the review of literature helped to streamline the scope of the study and served as a guide for seeking answers to the research questions in line with the study objectives. It also enabled comparison of the study findings with existing knowledge during the discussion of the results of the study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the methodology used in this research. It describes the study population, sample, research design, research setting, sampling technique, research instrument, data collection and data analysis as well as ethical considerations.

3.1. The Study Population

The study was conducted among nurses in the Sekondi-Takoradi Metropolitan Assembly (STMA) of Ghana. Statistics obtained from the Western Regional Health Directorate indicated that the documented number of nursing staff working in the STMA include 380 Registered General Nurses (RGN), 229 Registered Midwives (RM), 226 Enrolled Nurses (EN) and 226 Community Health Nurses (CHN) making a total 1067 nursing staff.

According to Asiamah, Mensah and Oteng-Abayie, (2017), populations used in research may be characterized as general, target and accessible population. General population is the entire group of individuals with similar characteristics about which some information is required. Target population is a subset of the general population from which a sample is obtained for the study. Accessible population is a subset of the target population that are available to be selected and studied. According to Banerjee and Chaudhury, 2010), the accessible population constitutes the study population. In this study, the general population comprised of the entire nursing staff in all healthcare facilities in the STMA that is the 1067 nursing staff.

3.2 The Study Sample

The subset of the population from which information is collected for a study is the sample (Kumar, 2011). Data was collected from 286 nurses selected out of the 1067 nurses in the STMA. They were selected from five health facilities in the STMA, namely Effia-Nkwanta Regional Hospital, Essikado, Takoradi and Kwesimintim District Hospitals and Ghana Ports and Harbours Authority (GPHA) Hospital. Thus, in accordance with the categorization of study populations by Asiamah, Mensah and Oteng-Abayie, (2017), the target population for this study involved all the nurses working in the five selected health facilities. The accessible population involved those on duty at the time of data collection. The final sample was the 286 nurses.

3.3 Research Design

The descriptive cross-sectional survey design was used in this research. It was quantitative, involving the gathering of numerical data to quantify the prevalence of HARSAD among nurses. It also quantifies the knowledge of the nurses about HARSAD and uses quantitative methods to examine the relationship between variables.

As a survey, it involved the study of a representative sample of nurses selected from a larger population of nurses and generalized the findings among the larger population (Creswell, 2014; Visser, Krosnick & Lavrakas, 2000). The survey was cross-sectional as data was collected at a single point in time (Visser, Krosnick & Lavrakas, 2000). Data was collected within a three weeks period from April to May, 2018. As a descriptive study, it depicted the current state of HARSAD exhibited by nurses against PLWHA without manipulating any variables. It also used descriptive statistics in analyzing the data with graphical presentation of the findings (Knupfer and Mclellan, 2001).

3.4 Research Setting

The study was conducted in the Sekondi-Takoradi Metropolitan Assembly (STMA) in the Western Region of Ghana. The STMA comprises of four sub-metros namely Sekondi, Takoradi, Essikado/Ketan and Effia/Kwesimintim, with Sekondi-Takoradi being the twin city capital of the region. A map of the study area is shown in figure 3.1

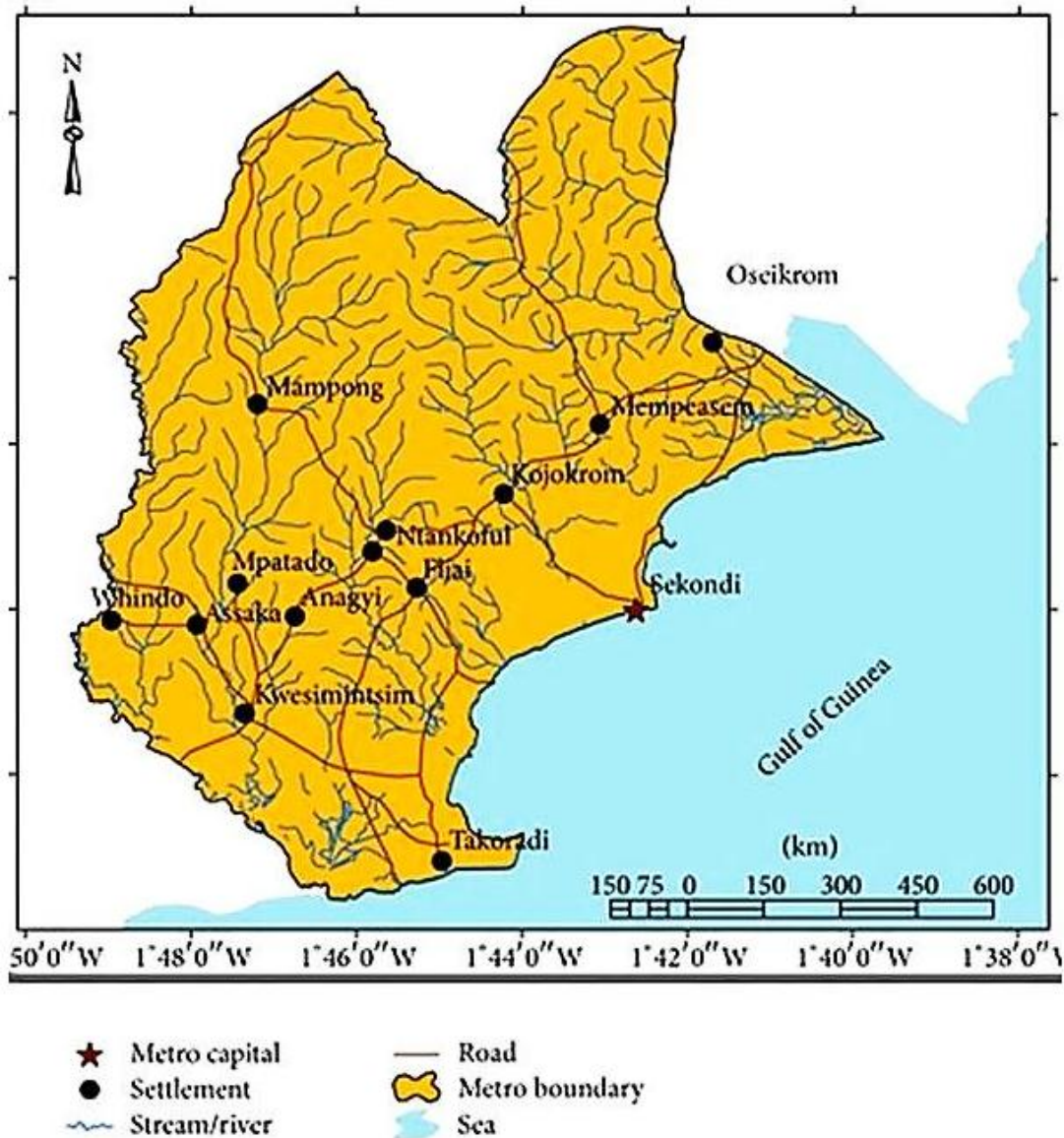


Figure 3.1: Map of Sekondi-Takoradi Metropolitan Assembly (STMA)

Source: Fei-Baffoe, Gorkeh-Miah and Nyankson (2014)

The specific settings in the STMA chosen for the study were five major healthcare facilities in the metropolis, at least one from each sub-metro, namely Effia-Nkwanta Regional Hospital in the Sekondi Sub-Metro, Takoradi Hospital and Ghana Ports and Harbours Authority (GPHA) Hospital in the Takoradi Sub-Metro, Kwesimintim Hospital in the Effia/Kwesimintim Sub-Metro and Essikado Hospital in the Ketan/Essikado Sub-Metro. Being the largest healthcare facilities in each sub-metro, they had the highest number of nurses, hence were preferred for the study.

The STMA was preferred as the area of interest for this study due to several reasons. Firstly, Takoradi which represents the STMA for the annual HIV sentinel surveys has consistently featured among the highest HIV prevalence urban areas in Ghana (NACP, 2017). According to findings from the annual national HIV sentinel surveys, Takoradi has recorded HIV prevalence of 3.8% (2013), 4.0% (2014), 2.8% (2015), 3.0% (2016) vis-à-vis the national HIV prevalence rate of 1.9% (2013), 1.4% (2014), 1.8% (2015), 2.4% (2016) respectively (NACP, 2017). This high HIV prevalence makes the metropolis a significant area to focus on with regards to HIV and AIDS in Ghana.

Secondly, the STMA has a youthful population which is an important factor to consider with regards to incidence of HIV and AIDS. According to the Ghana Statistical Service (2014), the STMA has a population of 559,548 representing 23.5 percent of the Western Region's total population and characterized as youthful with 96.1% living in in urban communities. A youthful population is critical for HIV prevention as it has been established that the spread of HIV tends to be highest among the youth (UNAIDS, 2016).

Thirdly, the emerging oil and gas industry in the region makes the STMA a potential hub for upsurge in HIV prevalence which cannot be glossed over. It has been established that emerging industries in an area such as the oil and gas industry in the Sekondi-Takoradi has the tendency to encourage migration into the area with its resultant social and health implications including the possible spread of HIV (Habib, 2016). This requires a healthcare workforce, especially nurses, adequately prepared to handle the presenting HIV and AIDS prevention, care and support burden, hence the significance of studying the opinions and attitudes of nurses in the metropolis towards HIV and AIDS.

3.5 Sampling

3.5.1 Sample Size determination

The number of entities in the study sample is the sample size (Kumar, 2011). A sample size of 286 nurses was used for the study. This was computed using an online sample size calculator (Creative Research Systems, 2012). The sample size calculator used, was based on the sample size formula:

$$n = \frac{Z^2 pq}{d^2}$$

n = desired sample size

z = standard deviation (set at 95%, confidence level 1.96)

p = the estimated proportion of the population which has the attribute being studied. This is the total general population of nurses in the STMA (1067).

q = 1.0 – p

d = degree of accuracy desired or margin of error set at 5% (0.05)

The total population (1067), the margin of error (5) and the confidence level (95%) were input into the online sample size calculator and a sample size of 285 was computed. To make room for possible non-return and non-completion of questionnaires, 300 nurses were initially targeted for the distribution of questionnaires with a total of 332 questionnaires distributed. 302 of the questionnaires were retrieved of which 16 were mostly uncompleted hence were considered invalid and discarded. This left 286 valid answered questionnaires representing a response rate of 86% and coinciding with the calculated sample size of 285. The data from the 286 valid answered questionnaires were eventually input and analysed.

3.5.2 Sampling Procedure

The sampling procedure used in this study was in two phases, firstly the sampling of healthcare facilities and secondly the sampling of nurses from the selected facilities. Purposive sampling was used in selecting the healthcare facilities while the selection of nurses from the selected healthcare facilities was based on convenience.

3.5.2.1 Sampling of Healthcare Facilities

According to Babbie (2011), purposive sampling is “a type of nonprobability sampling in which the units to be observed are selected on the basis of the researcher’s judgment about which ones are most useful or representative”. This method was used to select five (5) hospitals out of all healthcare facilities in the STMA based on inclusion and exclusion criteria determined by the researcher.

Firstly, the largest healthcare facilities within the metropolis were preferred for the study. This criterion was used so as to get the highest number of nurses from which to select the sample. The number of nurses working in a healthcare facility usually depends on the largeness of the facility in terms of bed capacity, patient attendance and acuity levels. Facilities with high bed capacity, patient attendance and acuity levels normally have high number of nurses hence were preferred for the study. Targeting facilities with the highest number of nurses increased the pool of nurses from which the sampling was done.

Secondly, healthcare facilities which provided in-patient care were preferred. In-patient care involves admitting patients to wards in the facility for longer periods of nursing care usually lasting beyond a day up to several weeks. Provision of in-patient care in the healthcare facility makes it possible for nurses to have longer period of interaction with patients, including patients living with HIV and AIDS (PLWHA), thereby allowing enough time for HIV and AIDS related stigma and discrimination (SAD) tendencies to emerge during the care of such patients. Healthcare facilities which were of general hospital and polyclinic status were preferred for the study as they provided in-patient care and had larger number of nurses as well. Facilities below polyclinic status such as health centers and day clinics were excluded as they did not provide in-patient care.

Thirdly, healthcare facilities which had HIV and AIDS units dedicated for provision of HIV and AIDS services such as testing, treatment, care and support were preferred for the study. It was expected that having HIV unit in the healthcare facility would make it more likely for people who receive their HIV treatment from the facility to be admitted there when they are sick, thereby increasing the chances of having patients living with HIV and AIDS on the wards in the selected healthcare facility.

A list of facilities that met the criteria preferred by the researcher was obtained from the Regional Health Directorate and ranked according to bed capacity and patient attendance. The healthcare facilities with highest patient attendance levels were selected. These included Effia-Nkwanta Regional Hospital, Takoradi Hospital, Kwesimintim Hospital, Essikado Hospital and Ghana Ports and Harbours Authority (GPHA) Hospital.

A target quota of nurses to be selected from each of these hospitals was assigned depending on the largeness of the facility. Effia-Nkwanta being the largest healthcare facility in the metropolis was assigned a target quota of 100 nurses while each of the other four healthcare facilities was assigned a target quota of 50 nurses amounting to a total of 300 nurses initially targeted for distribution of questionnaires.

3.5.2.2 Sampling of Nurses from the Selected Healthcare Facilities

The sampling of participants for the study was purposive. The eligibility criteria for being included in the study were that, the person must be a nurse registered by the Nursing and Midwifery Council of Ghana and working in any department, ward or unit in the five selected hospitals. Student nurses and ward assistants were excluded.

The selection of nurses within each of the selected hospitals for the study was based on convenience. According to Elfill and Negida (2017), convenience sampling involves the researcher selecting the sample elements according to their availability and accessibility. The convenience approach was used because it was the most practical option, taking into cognizance the morning-afternoon-night shift system which nurses rotate in their work attendance and diversity of wards and units where they work, making it impossible to get all them together at one point in time to perform a proper random sampling.

The sampling procedure involved going from ward to ward and proposing to the nurses on duty to participate in the study. Effort was made to include all wards and units as practicable. Questionnaire distribution was done during morning, afternoon and night shifts to give a chance to nurses working on all the three shifts to be included. Those who readily agreed to the proposal to participate in the study were selected as respondents for the study and given the research questionnaire to fill.

By the end of the study, the number of valid answered questionnaires obtained from nurses in each of the selected hospitals was 81 from Effia-Nkwanta Regional Hospital, 52 from Takoradi Hospital, 51 from Kwesimintim Hospital, 57 from Essikado Hospital and 45 from GPHA Hospital as shown in figure 3.2

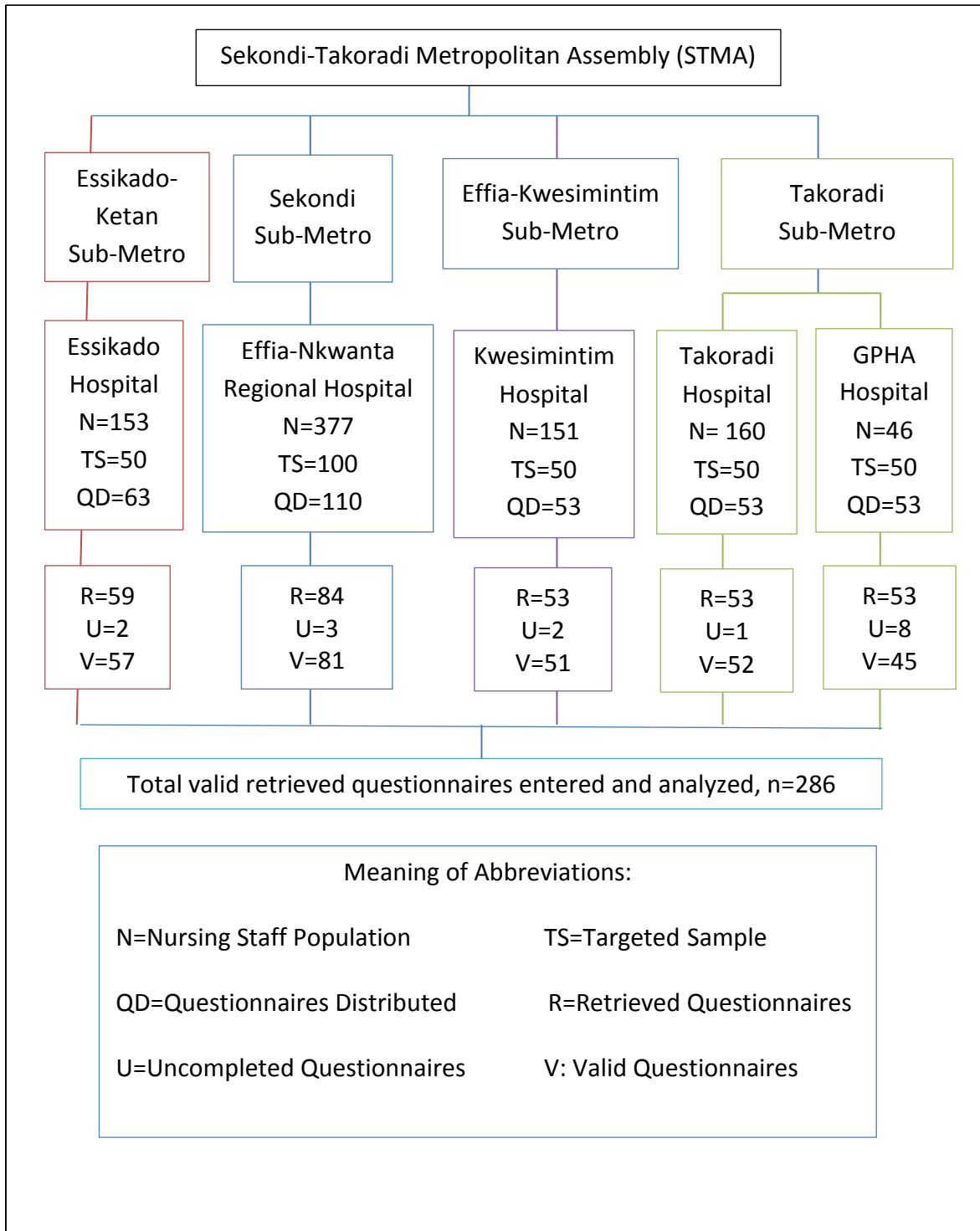


Figure 3.2: Flowchart outlining the sampling technique and final sample

3.6 Research Instrument

The research instrument used for data collection was a structured questionnaire partly constructed by the researcher and partly modified from other researchers' work. The questionnaire comprised of three sections including section A, B and C.

Section A collected demographic data of respondents including age, gender and educational qualification. It also collected work related data about the respondent including category of nursing, rank in nursing, number of years of practicing nursing, past and current history of work with patients living with HIV and AIDS (PLWHA), history of HIV testing and willingness to do HIV testing. Willingness to do HIV testing was rated on a linear scale numbered 1 to 5 where 1 means "not willing to do HIV testing at all" and 5 means "eager to do HIV testing". The respondent was instructed to circle the number which best depicts their degree of willingness to do HIV testing on the scale.

Section B tested nurses on their knowledge of what constitutes HIV and AIDS related SAD in the nursing care of PLWHA. It comprised of ten (10) statements with three possible responses each (Yes/No/Unknown). Respondents were instructed to choose one to indicate whether the statement constituted HIV and AIDS related SAD or not.

Section C was a modified version of the Health Care Provider HIV/AIDS Stigma Scale (HPASS) designed by Wagner, Hart, Mcshane, Margolese and Girard (2014) for assessing HIV and AIDS related stigma attitudes, opinions and discriminatory behaviors among healthcare providers towards patients living with HIV and AIDS. The original version of the HPASS consisted of three sub-scales including prejudice, stereotypes and discrimination.

It contained 30 ungrouped statements of which 13 statements assessed prejudice, 11 statements assessed stereotypes and 6 statements assessed discrimination by healthcare providers on a 6-point Likert Scale ranging from 1=strongly disagree to 6=strongly agree.

The modified version of the HPASS (MHPASS) used for this research in the section C of the questionnaire consisted of fifteen items, comprising of five statements selected from each of the three sub-scales of prejudice, stereotypes and discrimination of the original version of the HPASS. The selected statements were grouped under their respective sub-scales as prejudice (item 1-5), discrimination (items 6-10) and stereotypes (11-15). Respondents were instructed to indicate their level of agreement or disagreement with each of the statements by selecting one option on the 6-point Likert Scale including strongly disagree (1), disagree (2), somewhat disagree (3), somewhat agree (4), agree (5) and strongly agree (6). The option chosen indicates the level of HIV and AIDS related SAD exhibited by the respondent. The re

3.7 Test of Validity and Reliability of the Instrument

Validity of a research instrument refers to the extent to which the instrument measures the right concept under consideration while reliability deals with accuracy of the instrument in yielding the same result each time it is applied repeatedly to the same object (Babbie, 2011; Fung 2014). The validity and reliability of the structured questionnaire used in this research was determined using face validity and test-retest reliability method respectively.

Determination of face validity involves the review of the instrument by expert judges to determine whether the instrument is appropriate for the purpose of the study (Bolarinwa, 2016, Parsian & Dunning, 2009; Hardesty & Bearden, 2004). The validity of the questionnaire was determined by consulting expert opinion of research supervisors. The Ethics Committee for Humanities (ECH) of the University of Ghana Institute of Social and Economic Research (ISSER) also previewed the questionnaire and suggested corrections and modifications to improve its validity. These corrections were done before approval was given to commence the data collection for the study.

According to Bolarinwa (2016), test-retest method of ascertaining reliability of a research instrument involves repeated testing of the instrument with the same group of respondents under the same conditions on two different occasions. A reliable instrument is expected to yield a high correlation (≥ 0.70) between the responses given at the two different testing times (Bolarinwa, 2016, Hardesty & Bearden, 2004).

To determine the reliability of the questionnaire used for this research, a test-retest was done among ten (20) nurses at the Prestea Government Hospital in the Western Region of Ghana. Their first and second responses tested two weeks apart was coded and entered into Statistical Package for Social Sciences (SPSS, Version 23.0) to analyze and calculate reliability co-efficient for each of the sections of the questionnaire. Chronbach's alpha of 0.73 and 0.71 was obtained for section B and C respectively. The overall reliability coefficient for the questionnaire was 0.71

3.8 Data Collection Procedure

This research was based on primary data collected directly from respondents with a self-administered structured questionnaire. The questionnaires were administered through the paper and pen/pencil approach involving the physical distribution of the printed questionnaire to respondents who answered them directly by writing down their answers on the printed questionnaire and returned them to the researcher after completion.

The researcher recruited a senior nurse working in each of the selected hospitals to assist in the distribution and retrieval of questionnaires. This was necessary because a nurse working in the same facility was more likely to be accepted by their colleague nurses than just the researcher alone. Each of the nurses recruited was given a short training on how to do the data collection. The training included how to explain the study to prospective participants, how to distribute the questionnaire and how to retrieve them.

Questionnaire distribution involved moving from ward to ward during morning, afternoon and night shifts and randomly approaching nurses on duty and proposing to them about participating as respondents in the study. Those who expressed interest were given the questionnaire which contained preliminary pages comprising of the research information sheet and consent form as ethically required.

The information sheet explained the rationale of the research and the required role of each participant as a questionnaire respondent. It also explained the benefits and potential hazards of the study and assured of confidentiality of responses. Any questions prospective participants had concerning the study were clarified. Those interested in continuing as respondents were made to sign the consent form attached to indicate their

voluntary consent to participate as questionnaire respondents in line with ethical requirement before answering the questions.

Prospective participants were given enough time to answer the questionnaire at their convenience. The answering of the questions was expected to take about 20 minutes but those who could not answer and return them immediately were allowed to keep them and return them later after completion. Those who returned the answered questionnaire were given two pens each as a thank you gift. This approach was used for each respondent until the target sample size for each of the healthcare facilities selected for the study had been obtained. Data collection spanned over three weeks from April to May, 2018.

3.9 Ethical Considerations

Strict ethical standards were adhered to in this research to ensure that the study met the ethical requirements of truthfulness, justice, integrity, beneficence, non-maleficence, autonomy of participants, ensuring confidentiality and avoidance of deception. These were ensured by adhering to all the following requirements as outlined below:

3.10.1 Institutional Approval and Ethical Clearance

Institutional approval and ethical clearance was sought from the University of Ghana, Institute of Social and Economic Research (ISSER) Ethics Committee for the Humanities (ECH) and the Ghana Health Service (GHS) Ethics Review Committee (ERC). These institutions ensured that all necessary ethical requirements were met before giving approval for commencement of data collection. The ethical approval identity numbers for this study are ECH 091/17-18 from University of Ghana ECH and GHS-ERC: 014/02/18 from Ghana Health Service. These are shown in appendix A and B respectively.

3.10.2 Explanation of the Study to Participants

All prospective participants were given a participant information sheet which explained the rationale, benefits, potential hazards or risks and cost of participating in the study to them. They were informed about their voluntary participation and assured of confidentiality. All questions they had concerning the study were addressed sufficiently to ensure that they had full understanding of their rights, responsibilities and possible costs under the study before they made a decision to participate in the study.

3.10.3 Voluntary Participation, Informed Consent and Withdrawal

In respect of autonomy of participants, participation in the study was voluntary. Prospective participants were informed that, they could refuse to participate, withdraw from the study anytime or refuse to answer some questions they are uncomfortable about, without giving any explanation or suffering any penalty. All participants were made to sign informed consent form to indicate their voluntary participation in the study after reading the participant information sheet, all their queries addressed to their satisfaction and after being given some time to decide whether to participate in the study or not.

3.10.4 Confidentiality, Data Storage and Usage

Each respondent was kept anonymous by avoiding recording their name or any unique identity information. Their demographic or personal data and responses to questions were kept confidential by keeping the answered questionnaire under lock and key in the researcher's home with direct access limited to only the researcher. The data collected was only used for the purposes of this research and was not shared with any other researcher or institution. Only the final analyzed data of all responses has been published in this dissertation.

3.10 Data Analysis

Data collected included the demographic and professional characteristics of respondents, their knowledge of HARSAD and HIV testing history and willingness. These constituted the predictor variables while the outcome variable was HARSAD measured with the modified Health Care Provider HIV/AIDS Stigma Scale (MHPASS).

Codes were assigned to each of the possible responses for each item on the questionnaire and the responses from each of the 286 answered questionnaires were then entered into one by one into the IBM Statistical Package for Social Sciences software (SPSS, Version 23.0) for statistical analysis. The analysis included descriptive statistics such as frequencies, percentages, measures of central tendencies, analysis of variance (ANOVA), bivariate and multivariate analyses. Relationships between variable were examined with chi-square tests and regression analyses with significance level (P-value) set at 0.05

The responses from section A of the questionnaire comprising of gender, age, number of years of practicing nursing, current grade (rank) in nursing, nursing qualification, frequency of interaction with patients known to be living with HIV and AIDS, history of work in HIV and AIDS care, current job description, history of HIV testing and willingness to do HIV test were entered into SPSS and frequency tables generated from them and used for comparison of percentages and correlation analyses.

The answers to questions from section B of the questionnaire which tested knowledge of nurses on what constitute HIV and AIDS related SAD in the nursing care of PLWHA in their hospitals were marked to obtain a knowledge score for each respondent. The knowledge score represented the number of correctly answered questions over the total

number of ten questions asked. The score of each respondent was entered into SPSS and a frequency distribution graph generated to determine the number of respondents with low knowledge level (score below 4), moderate knowledge level (score from 4 to 5) and high knowledge levels (score from 6 to 10). These were then used for correlation analyses to test the relationship between the knowledge levels and other variables.

The Likert-scale responses for each item on the modified Health Care Provider HIV/AIDS Stigma Scale (HPASS) from section C of the questionnaire were entered into SPSS. Measures of central tendencies such as mean and standard deviation were then generated for each of the sub-scales of prejudice (item 1-5), discrimination (items 6-10) and stereotypes (1-15) on the scale. This helped to determine the percentage of nurses who scored high on each of the domains of HIV and AIDS related SAD on the scale. Total scores were also computed to estimate and compare the percentages of nurses who scored high or low on the scale. In addition, correlation analysis, analysis of variance (ANOVA) and multiple regression analyses were generated to determine the relationships between HARSAD scores and other relevant variables.

3.11 Dissemination of Research Findings

Copies of this dissertation will be submitted to the Ghana Health Service Library and various libraries at University of Ghana including the School of Graduate studies, Department of Distance Education and School of Nursing and Midwifery. It will also be submitted to an appropriate journal for possible publishing. In addition, it will be presented at various research conferences and workshops.

CHAPTER FOUR

ANALYSIS OF DATA AND PRESENTATION OF RESULTS

4.0 Introduction

This chapter presents the results of data analysis for the study. It describes the types of data collected and analyses conducted on them with presentation of the results in the form of tables and figures and description of the findings.

In line with the study objectives, the study measured the prevalence of HARSAD among nurses, assessed their knowledge of HARSAD and examined the influence of their knowledge and personal characteristics on their perpetration of HARSAD. Quantitative data comprising of categorical and continuous variables were collected with a self-administered structured questionnaire. The categorical variables included demographic characteristics (gender, age groups and levels of education), professional characteristics (years of nursing practice and ranks in nursing), work experiences with PLWHA, history of HIV testing and scores on the MHPASS. The continuous variables included HARSAD knowledge scores and scores on the ratings of willingness to do HIV testing.

The responses were coded and entered into SPSS for statistical analysis. The types of analyses that were conducted depended on the nature of the data. Descriptive statistics including frequencies, percentages and measures of central tendencies were used to describe the composite responses. Chi-square tests, correlation analysis, analysis of variance (ANOVA) and regression analyses were used to examine the relationships between relevant variables with significance level (p-value) set at 0.05.

4.1 Demographic characteristics of respondents

The demographic characteristics of respondents are summarized in table 4.1.

Table 4.1: Demographic characteristics of respondents

Characteristics	Frequency (n=286)	Percentage (%)
Gender		
Male	35	12.20
Female	251	87.80
Age groups		
18-30	151	52.80
31- 40	111	38.81
41-50	12	4.20
Above 50	9	3.15
Missing	3	1.05
Level of Education		
Certificate	74	25.90
Diploma	140	49.00
First Degree	63	22.00
Post Graduate	9	3.10

Source: Field survey, 2018

As shown in table 4.1, of the 286 respondents, most of them 251 (87.80%) were female and only 35 (12.2%) were males. Majority of the respondents 151 (52.80%) were in the 18-30 years age group and the least 9 (3.15%) in the above 50years age group. Also 140 (49.00%) were diploma nurses followed by certificate enrolled nurses 74 (25.90%) then 63 (22.00%) first degree nurses and lastly 9 (3.1%) post graduate nurses.

4.2 Professional characteristics of respondents

Table 4.2 shows the professional characteristics of the respondents (nurses).

Table 4.2: Years of nursing practice and nursing ranks of respondents

Characteristics	Frequency (n=286)	Percentage (%)
Years of practicing nursing		
<1	40	14
1-3	67	23.40
4-6	78	27.30
7-10	52	18.20
11-13	24	8.40
14-16	9	3.10
17-20	2	0.70
Above 20	14	4.90
Current grade/rank in nursing hierarchy		
Enrolled	75	26.22
Staff	103	36.01
Senior Staff	39	13.64
Officer	38	13.29
Senior Officer	21	7.34
Principal	9	3.15
Missing	1	0.35

Source: Field survey, 2018

As shown in table 4.2, 78 (27.30%) of respondents were in the 4-6years nursing practice category followed by 67 (23.40%) in the 1-3years category. Those with 15-20 years working experience constituted the least number of respondents, 2 (0.70%). Most of the respondents were staff nurses 103 (36.01%) followed by enrolled nurses 75 (26.22) and thereafter decreasing number of respondents with advancing nursing rank.

4.3 Correlations among respondents' demographic and professional characteristics

Spearman's correlation analysis was used to examine relationships among the categorical variables under the respondent's demographic characteristics (gender, age groups and educational qualification) and their professional characteristics (years of nursing practice and ranks in nursing). The results are shown in table 4.3.

Table 4.3: Correlation analysis among demographic and professional characteristics

			Years of			
		Gender	Age group	practicing nursing	Current rank	Educational Qualification
Gender	<i>rs</i>	1.000	-.156**	-.142*	-.141*	-.058
	Sig. (2-tailed)	.	.009	.016	.017	.328
	N	286	283	286	285	286
Age group	<i>rs</i>	-.156**	1.000	.755**	.432**	.303**
	Sig. (2-tailed)	.009	.	.000	.000	.000
	N	283	283	283	282	283
Years of practicing nursing	<i>rs</i>	-.142*	.755**	1.000	.402**	.287**
	Sig. (2-tailed)	.016	.000	.	.000	.000
	N	286	283	286	285	286
Current grade/rank	<i>rs</i>	-.141*	.432**	.402**	1.000	.838**
	Sig. (2-tailed)	.017	.000	.000	.	.000
	N	285	282	285	285	285
Educational Qualification	<i>rs</i>	-.058	.303**	.287**	.838**	1.000
	Sig. (2-tailed)	.328	.000	.000	.000	.
	N	286	283	286	285	286

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The result indicates that gender had a significant indirect correlation with age group, $r_s(283) = -0.15$, p-value <0.05 , 2 tailed, years of practicing nursing, $r_s(286) = -0.14$, p-value <0.05 , 2 tailed, rank in nursing, $r_s(285) = -0.14$, p-value <0.05 , 2 tailed, but no significant relationship with educational qualification, $r_s(286) = -0.058$, p-value=0.32.

Age group had significant direct correlation with of years of nursing practice, $r_s(283) = +0.75$, p-value <0.05 , 2 tailed, rank in nursing, $r_s(282) = +0.43$, p-value <0.05 , 2 tailed and educational qualification $r_s(283) = +0.303$, p-value <0.05 , 2 tailed.

Similarly there was significant direct correlation between number of years of practicing nursing and nursing rank, $r_s(285) = +0.40$, p-value <0.05 , 2 tailed, as well as years of nursing practice and educational qualification $r_s(286) = +0.287$, p-value <0.05 , 2 tailed.

There was also a significant direct correlation between nursing rank and educational qualification $r_s(285) = +0.838$, p-value <0.05 , 2 tailed

These results were expected since progression in nursing rank is usually related to number of years of practice and educational advancement which usually goes with increasing age but does not depend on gender. The reason why gender was found to be inversely related to the all the other variables could be because males nurses mostly do not usually stay on the ward long enough to progress through the ranks as they advance in educational qualification and age.

4.4 Respondents’ work experience with PLWHA

Data collected about respondents’ experiences of working with PLWHA included past and current experience of work in HIV/AIDS units/wards and frequency of interaction with PLWHA at work. The responses given are shown in table 4.4.

Table 4.4: Respondents’ work experiences with PLWHA

Work experiences with PLWHA	Frequency (n=286)	
Experience of work in HIV/AIDS unit/ward	f	(%)
Never worked in HIV/AIDS specialty care unit before	160	55.9
Worked in HIV/AIDS specialty unit in the past	98	34.3
Currently working in HIV/AIDS specialty unit	28	9.8
Frequency of interaction with PLWHA work		
Every working day	95	33.2
1-3 in a week	29	10.1
Less than 4 in a month	17	5.9
Once in a while	107	37.4
Rarely	28	9.8
I do not know	10	3.5

Source: Field survey, 2018

As shown in table 4.4, in terms of experience of working in HIV/AIDS specialized wards/units, majority 160 (55.9) had never worked in HIV/AIDS units before while 98 (34.3%) had worked there in the past and only 28 (9.8%) were currently working there.

In terms of frequency of interaction with PLWHA at work, 107 (37.4%) of respondents stated that they interact with PLWHA “once in a while”, while 95 (33.2%) stated that they interact with PLWHA every working day, and 10 (3.5%) were unable to specify the frequency of their interaction with PLWHA.

4.5 Correlation between respondents' experience of working in HIV/AIDS units and frequency of interaction with PLWHA

A cross tabulation and correlation analysis was done between respondents' experience of working in HIV/AIDS units and frequency of interaction with PLWHA to test association between the two ordinal categorical variables. The results are shown in the table 4.4.

Table 4.5: Cross tabulation between respondents' experience of working in HIV/AIDS units and frequency of interaction with PLWHA

		Experience of work in HIV/AIDS unit/wards				Spearman Correlation	
		Never	Past	Current	Total	<i>rs</i>	p-value
Frequency of interaction with PLWHA	Everyday	37	37	21	95	-0.329	.000**
	1-3/ week	14	11	4	29		
	<4/month	8	9	0	17		
	Once in a while	72	32	3	107		
	Rarely	21	7	0	28		
	Unknown	8	2	0	10		
	Total	160	98	28	286		

** . Correlation is significant at the 0.05 level

As evident from table 4.5, respondents' frequency of interaction with PLWHA shows a statistically significant inverse correlation with their experience of work in HIV and AIDS units, $r_s (286) = -0.32$, p-value <0.05. This implies that frequency of interaction with PLWHA among respondents depended on whether they were working in HIV/AIDS units or not.

4.6 Comparison of frequency of interaction with PLWHA among respondents

It was expected that those who work in HIV/AIDS units would have more frequent interaction with PLWHA than those who do not work in such units. This was tested by comparing the percentages of “frequency of interactions with PLWHA” among the three categories of respondents under “experience of work with in HIV/AIDS specialty unit”

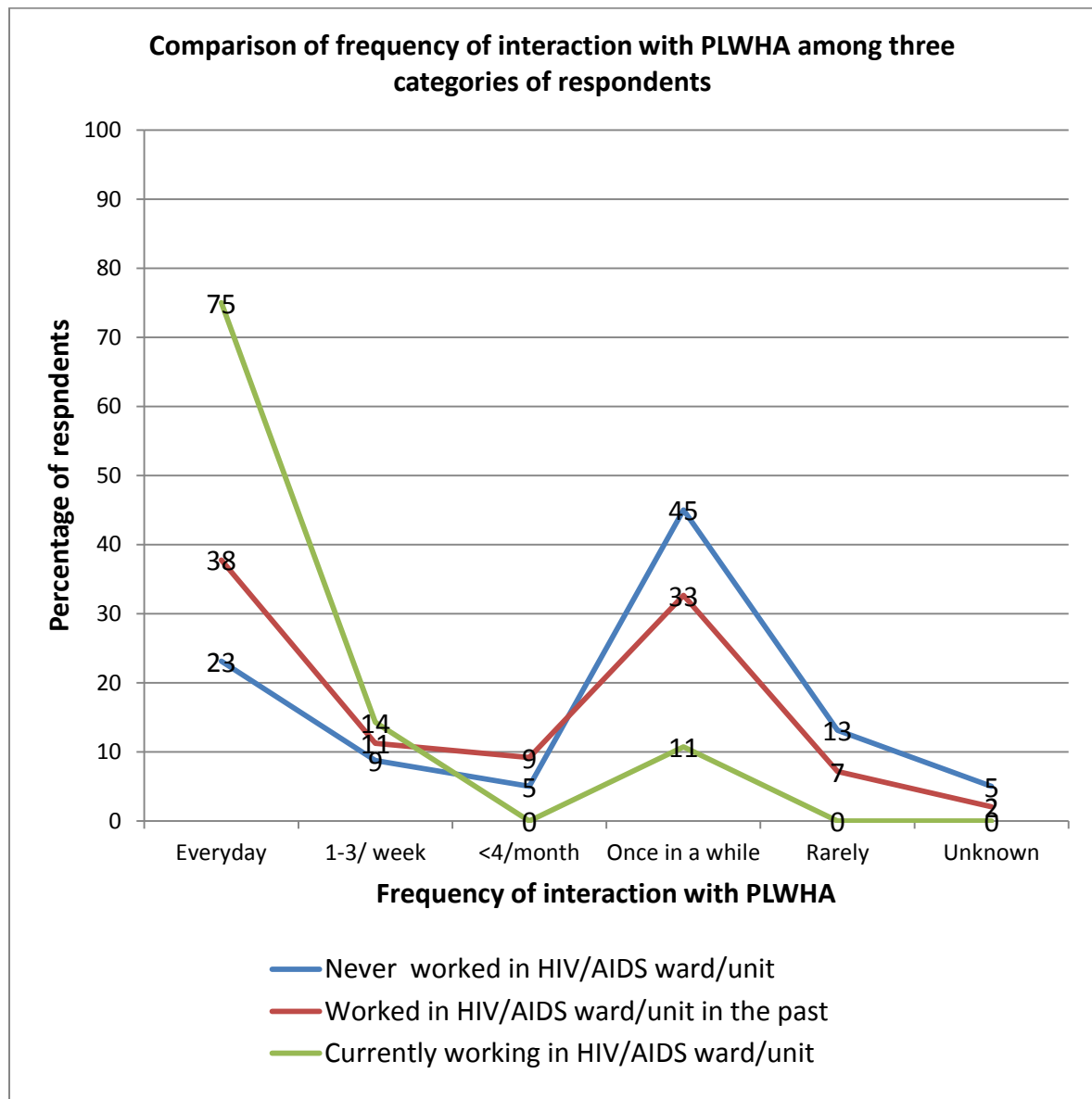


Figure 4.1: Comparison of frequency of interaction with PLWHA among respondents

It is obvious from figure 4.1 that “everyday” interaction with PLWHA among those who were currently working in HIV/AIDS units was highest (75%) for everyday interaction, 11% for “once in a while” interaction and tapered down to zero for “rare” and “unknown” frequency of interaction.

The result among those who were not working in HIV/AIDS units (comprising of those who had worked in HIV/AIDS units in the past and those who had never worked in HIV/AIDS) shows similar patterns. Among those who had worked in HIV/AIDS unit in the past, “once in a while” interaction with PLWHA was almost equal to “everyday” interaction (38% and 33% respectively) and tapered down to 7% for “rare” and 2% for “unknown” frequency of interaction with PLWHA

Among those who had never worked in HIV/AIDS units before, “once in a while” interaction with PLWHA was twice higher (45%) than “everyday” interaction with PLWHA (23%) and tapered down to 13% for “rare” and 5% for “unknown” frequency of interaction with PLWHA.

In summary, the comparison clearly reveals that respondents who were working in HIV/AIDS units had far higher frequency of interaction with PLWHA, with their daily interactions being at least twice higher than that of those who were not working in HIV/AIDS units. This result was expected as working in HIV/AIDS unit involves meeting PLWHA on a daily basis while working in general wards involves less frequent contacts with PLWHA. From the conceptual framework of the study, it was anticipated that respondents’ frequency of interaction with PLWHA may influence their perpetration of HARSAD against PLWHA.

4.7 History of HIV testing among respondents

Respondents were asked if they had undergone HIV testing before. The responses given to this query are shown graphically in figure 4.2.

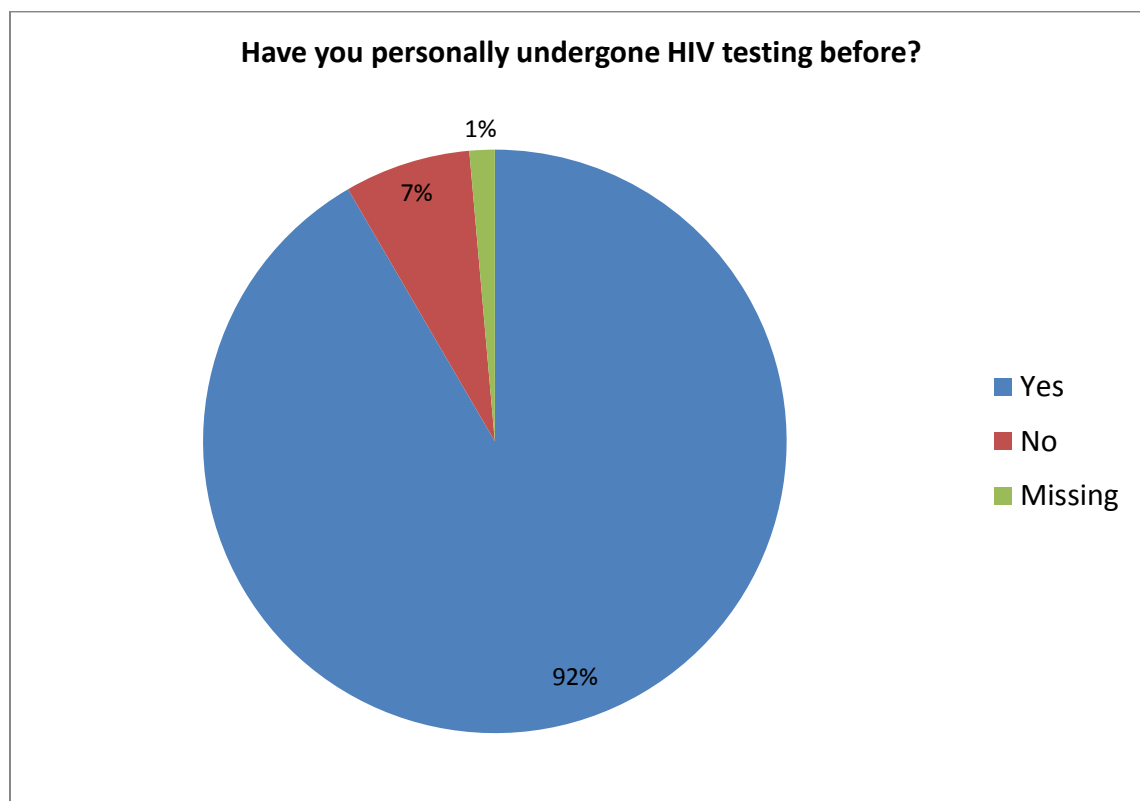


Figure 4.2: History of HIV testing among respondents

Source: Field survey, 2018

As evident from figure 4.2, most of the respondents, 262 (91.6%) answered in the affirmative that they had done HIV testing before while 20 (7.0%) answered in the negative and 4 (1.4%) did not respond constituting missing response. This shows a very high rate of HIV testing among the respondents. This result was expected since nurses are expected to check their HIV status frequently due to the risk of HIV infection in their work. It was rather surprising that some nurses had never undergone HIV testing before.

4.8 Willingness to do HIV testing among respondents

Respondents were asked to rate their willingness to undergo HIV testing on a scale of 1 to 5 where 1 meant “not willing at all” and 5 meant “eager” to do HIV testing. A graphical presentation of the responses is shown in figure 4.3

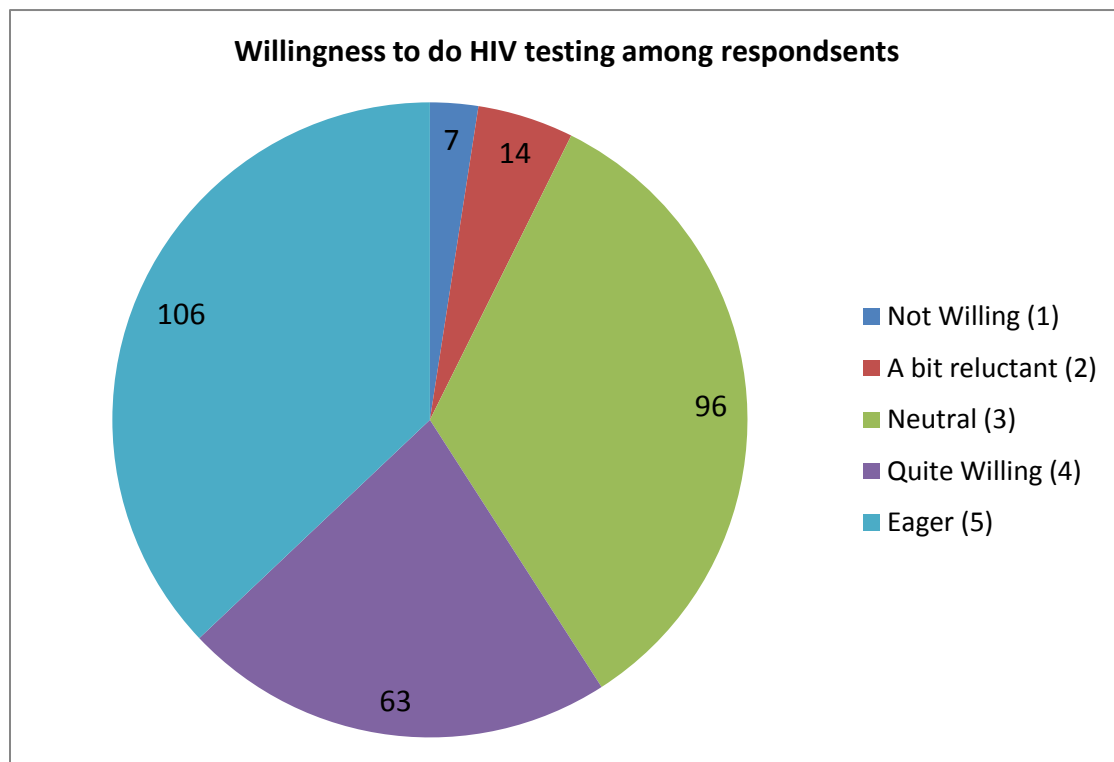


Figure 4.3: Rating of willingness to do HIV testing

Source: Field survey, 2018

Of the 286 respondents, 106 (37.1%) were eager, 96 (33.6%) were neutral, 63 (22%) were quite willing, 14 (4.9%) were a bit reluctant and 7 (2.4%) were not willing at all. The mean rating was 3.86 with standard deviation (SD) of 1.05 which corresponds with majority of respondents 168 (58.74%) indicating willingness to do HIV testing.

4.9 Relationship between previous test and current willingness to test for HIV

Cross tabulation and correlation analysis was done to test whether there was any relationship between the history of HIV testing and willingness to undergo HIV testing among the respondents. Spearman's correlation was used due to the categorical nature of the variable, history of HIV testing. The result is shown in table 4.6.

Table 4.6: Cross tabulation between previous test and willingness to test for HIV

Willingness	Have you personally undergone HIV testing before?			Spearman's rho		
	Yes	No	Total	N	<i>rs</i>	p-value
	F (%)	F (%)				
Not Willing (1)	6(85.71)	1(14.29)	7	282	-0.05	0.35
A bit reluctant (2)	14(100)	0	14			
Neutral (3)	85(89.47)	10(10.53)	95			
Quite Willing (4)	59(95.16)	3(4.84)	62			
Eager (5)	98(94.23)	6(5.77)	104			
Total	262(92.91)	20(7.09)	282			

It can be seen from table 4.6 that 85.71% of respondents who were not willing to do HIV testing, had already tested before. All those who were a bit reluctant had tested before and 89.47% of those who were neutral had tested before. On the other hand, 10.61% of those who expressed willingness to test had never tested before. Spearman's rho between the two variables show no significant relationship between them, $r_s(282) = -0.05$, $p\text{-value} = 0.35$. This implies that previous history of HIV testing had no association with current willingness to test for HIV among the study population.

4.10 Knowledge of HIV and AIDS related SAD among respondents

Respondents were tested on their knowledge about what constitute HARSAD. They were instructed to select one answer out of three options (Yes/No/Unknown) for each of the statements in table 4.7 to indicate whether it constituted HARSAD or not.

Table 4.7 HARSAD knowledge test questions

Question Number	Statement being evaluated for being HARSAD or not
1	How you feel about PLWHA can constitute HIV/AIDS-related SAD even if you don't show it
2	During wound dressing, people who don't have HIV or AIDS are treated first before treating PLWHA
3	Using a special code name to refer to the diagnosis of a person with HIV or AIDS to conceal their HIV status from other people
4	Referring PLWHA to other health facilities or staff even though the level of care they need is within your competency level
5	Designating a special ward or beds only for admitting PLWHA
6	Wearing gloves when performing activities for which you would not have worn gloves if the patient did not have HIV or AIDS
7	HIV/AIDS-related stigma and discrimination includes what you think about PLWHA even if you don't speak about it
8	Labeling the folder of PLWHA with a special mark or using a unique folder for them to alert other healthcare team members that the patient has HIV or AIDS
9	Only the actions you manifest towards PLWHA can be described as HIV/AIDS-related stigma and discrimination
10	Refusing to tell the relatives of PLWHA about their HIV+ status

4.10.1 Responses to questions about what constitute HARSAD

Table 4.8 shows the responses given by respondents for each of the items used in testing the knowledge of respondents about HARSAD. The responses given by each respondent were marked as to whether they were correct or not. Figure 4.3 shows the performance of respondents in terms of correct and wrong responses for each question.

Table 4.8: Participants’ answers to questions testing their knowledge of HARSAD

Question Number	Responses given by respondents (n=286)				Correct Answer	Mode response
	Yes =1	NO =2	Unknown=3	Missing		
	F (%)	F (%)	F (%)	F (%)		
1	164(57.3)	101(35.3)	20(7.0)	1(0.3)	1	1
2	163(57.0)	110(38.5)	12(4.2)	1(0.3)	1	1
3	155(54.2)	119(41.6)	10(3.5)	1(0.3)	2	1
4	146(51.0)	117(40.9)	22(7.7)	1(0.3)	1	1
5	135 (47.2)	133(46.5)	17(5.9)	1(0.3)	1	1
6	151(52.8)	120(42.0)	14(4.9)	1(0.3)	1	1
7	134 (46.9)	112(39.2)	40(14.0)	0	1	1
8	139 (48.6)	127(44.4)	20(7.0)	0	1	1
9	137(47.9)	121(42.3)	27(9.4)	1(0.3)	2	1
10	97 (33.9)	156(54.5)	32(11.2)	1(0.3)	2	2

Source: Field survey, 2018

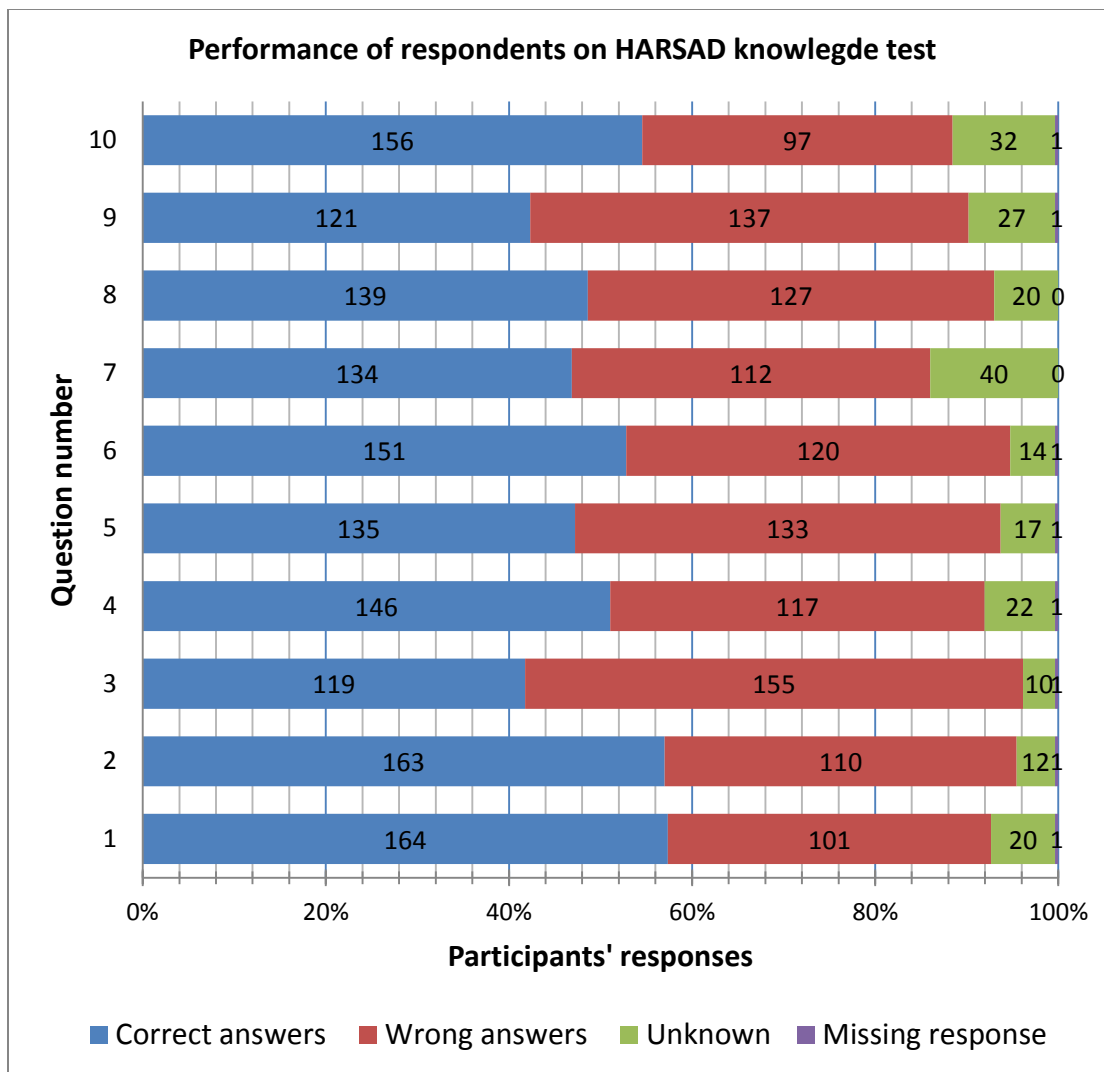


Figure 4.4 Performance of respondents on HARSAD knowledge test

Source: Field survey, 2018

The statement that “how you feel about PLWHA can constitute HARSAD even if you don’t show it” is correct because HARSAD does not only involve overt behavior but include covert thoughts, emotions and feelings as well. Majority of respondents 164 (57.3%) answered correctly to this statement with a “yes” response while 101 (35.32%) of the respondents answered wrongly with a “no” response and 20 (7%) of the respondents indicated that they did not know the right answer with “unknown” response. 1 (0.3%) respondent did not answer this question, constituting a missing response.

The practice of “treating people who don’t have HIV or AIDS first before treating PLWHA during wound dressing” constitute HARSAD as it involves preferential treatment of patients who don’t have HIV or AIDS against PLWHA. It also involves unwarranted delayance of care simply because of the person’s HIV or AIDS status. Majority of respondents 163 (57.0%) answered correctly with a “yes” response for this statement while 110 (38.5%) of the respondents answered wrongly with a “no” response and 12 (4.2%) respondents responded that they did not know the right answer. 1 (0.3%) respondent did not answer this question, constituting a missing response.

“Using a special code name to refer to the diagnosis of a person with HIV or AIDS to conceal their HIV status from other people” is an accepted practice in the care of PLWHA and does not constitute HARSAD as it helps to keep the HIV status of the person confidential. This statement was answered correctly with a “no” response by 119 (41%) of respondents that it did not constitute HARSAD while majority 155 (54.2) answered it wrongly with a “yes” response and 10 (3.5%) indicated that they did not know the right answer with “unknown” response.

“Referring PLWHA to other health facilities or staff even though the level of care they need is within your competency level” constitutes HARSAD as it involves avoidance of PLWHA and denying them of care. This was answered correctly with a “yes” response as constituting HARSAD by majority 155 (54.2%) of respondents while 117 (40.9%) of the respondents answered it wrongly with a “no” response. 22 (7.7%) indicated that they did not know with “unknown” response and there was 1 (0.3%) missing response.

“Designating a special ward or beds only for admitting PLWHA” constitutes HARSAD as it involves separation of PLWHA from other patients which is not clinically indicated if they do not have other infectious diseases requiring such precautions. This statement was answered correctly with a “yes” response by 135 (47.2%) of respondents as constituting HARSAD while 133 (46.5%) of the respondents answered it wrongly with a “no” response and 17 (5.9%) of the respondents indicated that they did not know the right answer with “unknown” response. There was 2 (0.3%) missing response for this query.

The practice of “wearing gloves when performing activities for which you would not have worn gloves if the patient did not have HIV or AIDS” constitute HARSAD as it involves clinically unindicated precautions being taken just because the patient has HIV or AIDS. Majority of the respondents 151 (52.8%) answered correctly with a “yes” response while 120 (42.0) answered it wrongly with a “no” response. 14 (4.9%) indicated that they did not know the right answer with “unknown” response.

“Labeling the folder of PLWHA with a special mark or using a unique folder for them to alert other healthcare team members that the patient has HIV or AIDS” constitutes HARSAD because it involves differentiating PLWHA from other patients on the basis of their HIV status. Majority of respondents 139 (48.6%) answered correctly with a “yes” responses while 127 (44.4%) answered wrongly with a “no” response. 20 (7.0%) respondents indicated that they did not know the right answer.

The statement that “HIV/AIDS-related stigma and discrimination (SAD) includes what you think about PLWHA even if you don’t speak about it” is correct because HARSAD is not restricted to only overt behavior such as speech but includes covert affects and

thoughts as well. Majority of respondents 134 (46.9%) answered correctly with a “yes” response to this statement while 112 (39.2%) answered wrongly with a “no” response and 40 (14.0%) indicated that they did not know the right answer to this query.

Similarly, the statement that “only the actions you manifest towards PLWHA can be described as HARSAD” is incorrect as HARSAD goes beyond overt actions. Majority of respondents 137 (47.9%) answered this wrongly with a “yes” response while 121 (42.3%) answered it correctly “no” response. 27 (9.4%) of the respondents indicated that they did not know the right answer for the statement and there was 1 (0.3%) missing response.

“Refusing to tell the relatives of PLWHA about their HIV positive status” does not constitute HARSAD as it is an ethical requirement for healthcare providers to keep their patients’ HIV status confidential. Majority of respondents 156 (54.5%) answered correctly with a “no” response indicating that this practice does not constitute HARSAD while 97 (33.9%) answered it wrongly with a “yes” response and 32 (11.2%) indicated that they did not know the right answer to this query.

Putting it all together, 8 items (questions 1, 2, 4, 5, 6, 7, 8 and 10) received higher percentages of correct responses than wrong answers while 2 items (question 3 and 9) received higher percentages of wrong answers than correct answers. However there were high percentages of “unknown” responses ranging from 3.5% to 14.0% for all the questions. The most wrongly answered item was question 3 while the most correctly answered item was question 1. In summary, most of the respondents scored less than 5 correctly answered questions out of 10 as evidenced by the mean score of 4.93.

4.10.2 Knowledge score distribution among respondents

Figure 4.5 shows the frequency distribution curve for knowledge scores among respondents obtained from their correctly answered questions out of the total of 10 questions. Most of respondents 55 (19.2%) scored 5 out of 10 followed by 49 (17.1%) scoring 4 out of 10. 47 (16.4%) scored 3 out of 10 and 40 (14.0%) scored 6 out of 10.

Altogether, 123 (43.0%) of respondents scored less than 5 out of 10 while 108 (37.8%) scored more than 5 out of 10 implying that majority of respondents answered less than half of the questions correctly. The mean knowledge score was 4.93 with standard deviation (SD) of 2.029 implying that most respondents scored less than 5 out of 10.

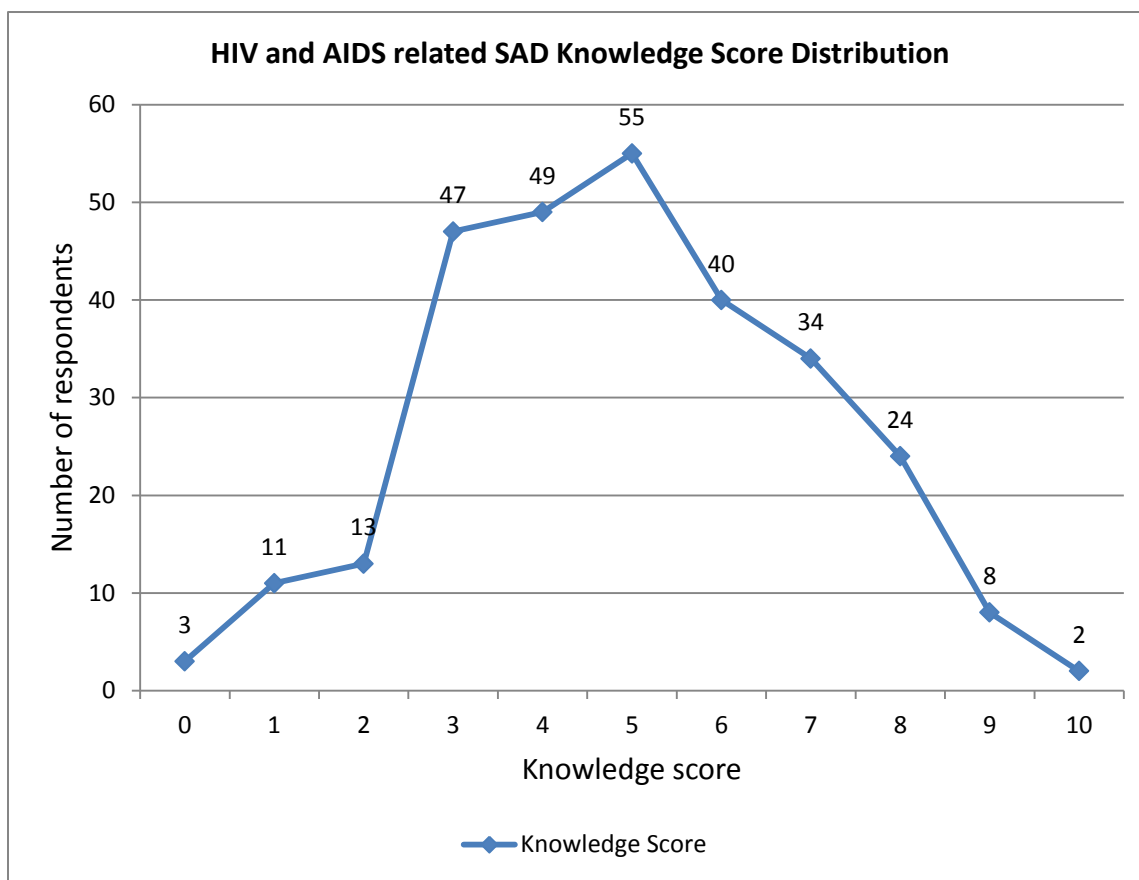


Figure 4.5 HIV and AIDS related SAD knowledge score distribution among respondents

Source: Field survey, 2018

4.10.3 HARSAD knowledge levels among respondents

The HARSAD knowledge scores were categorised into three knowledge levels including low knowledge level (knowledge scores below 4), moderate knowledge level (knowledge scores from 4 to 5) and high knowledge level (knowledge scores from 6 to 10). As shown in table 4.9, majority of respondents 108 (37.76%) had high knowledge level followed by 104 (36.36%) with moderate knowledge level and lastly 74 (25.87%) with low knowledge level. However the overall mean knowledge score of 4.93 implies a moderate knowledge level among the respondents as a whole.

Table 4.9: Knowledge scores and knowledge levels obtained by respondents

Knowledge score	Frequency (n=286) f (%)	Knowledge Level Categories	Σf (%)
0	3 (1.0)	Low Knowledge Level (Knowledge score <4)	74 (25.87)
1	11 (3.8)		
2	13 (4.5)		
3	47 (16.4)		
4	49 (17.1)	Moderate Knowledge Level (Knowledge score 4-5)	104 (36.36)
5	55 (19.2)		
6	40 (14.0)	High Knowledge Level (Knowledge score 6-10)	108 (37.76)
7	34 (11.9)		
8	24 (8.4)		
9	8 (2.8)		
10	2 (0.7)		

Source: Field survey, 2018

4.10.4 Association between knowledge and characteristics of respondents

Chi-Square tests were conducted to examine associations between the respondents' HARSAD knowledge scores and other characteristics as shown in the table below.

Table 4.10 Chi-Square tests between knowledge scores and other variables

Respondents' characteristics	Pearson Chi-Square			
	N	X ²	df	P-value
Gender	286	12.601	10	0.247
Age	283	88.500	60	0.010**
Years of practicing nursing	286	82.213	70	0.151
Current nursing rank	285	99.734	100	0.489
Educational qualification	286	41.701	30	0.076
Frequency of interaction with PLWHA	286	37.400	50	0.906
Experience of work in HIV/AIDS unit/ward	286	32.957	20	0.034**
History of HIV testing	286	12.422	20	0.901
Willingness to undergo HIV testing	286	43.069	40	0.341

**P<0.05

As shown in table 4.4, the results showed no statistically significant relationships between HARSAD knowledge scores and gender, $X^2(10, 286)=12.601, p=0.247$, years of practicing nursing, $X^2(70, 286)=82.213, p=0.151$, nursing rank, $X^2(100, 286)=99.734, p=0.489$, educational qualification, $X^2(30, 286)=41.701, p=0.076$, frequency of interaction with PLWHA, $X^2(50, 286)=37.400, p=0.906$, history of HIV testing, $X^2(20, 286)=12.422, p=0.901$, and willingness to test for HIV, $X^2(20, 286)=12.422, p=0.341$.

This implies that the respondent's gender, years of nursing practice, nursing rank, educational qualification, frequency of interaction with PLWHA, history of HIV testing and willingness to do HIV test had no effect on their knowledge about HARSAD.

However, a statistically significant relationship was found between HARSAD knowledge scores and age, $X^2(60, 286) = 88.500, p < 0.05$ as well as HARSAD knowledge scores and experience of work in HIV and AIDS units, $X^2(20, 286) = 32.957, p < 0.05$. This implies that the respondent's experience of work in HIV and AIDS units had strong influence on their knowledge of HARSAD.

4.11 Mechanisms of HARSAD among respondents

Respondents rated their level of agreement or disagreement with statements on the MHPASS by selecting one option on a 6-point Likert Scale ranging from strongly disagree (1) to strongly agree (6) for each statement. The responses were entered into SPSS and frequency tables and descriptive statistics generated for each of the sub-scales comprising of prejudice (item 1-5), discrimination (items 6-10) and stereotypes (11-15) as well as the whole scale (item 1-15).

A response from 1 to 3 indicated disagreement with statements on the MHPASS implying non-existence of HARSAD tendencies while a response from 4 to 6 indicated agreement, implying existence of HARSAD tendencies. Table 4.11 shows a summary of the responses in agreement and disagreement with statements on the MHPASS. Table 4.12 shows the descriptive statistics for the responses. Low mean scores indicate more disagreements with the statements on the MHPASS implying less HARSAD tendencies while high mean scores indicate more agreements, implying more HARSAD tendencies.

Table 4.11 Summary of responses in agreement or disagreement on the MHPASS

MHPASS Items	N (responses)	[Strongly Disagree (1), Disagree (2), Somewhat disagree (3)]		[(Somewhat Agree (4), Agree (5), Strongly Agree (6)]		
		Σf	(%)	Σf	(%)	
Prejudice Subscale	1	283	185	65.37	98	34.63
	2	284	249	87.68	35	12.32
	3	286	193	67.48	93	32.52
	4	286	137	47.90	149	52.10
	5	286	226	79.02	60	20.98
Prejudice Subtotal:		1425	990	69.47	435	30.53
Discrimination Subscale	6	286	269	94.06	17	5.94
	7	285	258	90.53	27	9.47
	8	285	260	91.23	25	8.77
	9	286	255	89.16	31	10.84
	10	285	196	68.77	89	31.23
Discrimination Subtotal:		1427	1238	86.76	189	13.24
Stereotypes Subscale	11	285	167	58.60	118	41.40
	12	286	194	67.83	92	32.17
	13	285	247	86.67	38	13.33
	14	283	239	84.45	44	15.55
	15	285	170	59.65	115	40.35
Stereotypes Subtotal:		1424	1017	71.42	407	28.58
HARSAD Total		4276	3245	75.89	1031	24.11

Source: Field survey, 2018

Table 4.12 Descriptive statistics for MHPASS items

Item	N	Min.	Max.	Sum	Mean	Standard Deviation	Variance	
Prejudice Subscale	1	283	1	6	790	2.79	1.689	2.854
	2	284	1	6	555	1.95	1.292	1.669
	3	286	1	6	764	2.67	1.573	2.474
	4	286	1	6	976	3.41	1.615	2.608
	5	286	1	6	646	2.26	1.410	1.989
Subscale summary:				3731	2.61	1.06	1.117	
Discrimination Subscale	6	286	1	6	474	1.66	.937	.879
	7	285	1	6	520	1.82	1.153	1.328
	8	285	1	6	536	1.88	1.110	1.232
	9	286	1	6	554	1.94	1.183	1.400
	10	285	1	6	790	2.77	1.575	2.479
Subscale summary				2874	2.01	0.87	0.754	
Stereotypes Subscale	11	285	1	6	857	3.01	1.712	2.930
	12	286	1	6	755	2.64	1.451	2.105
	13	285	1	6	609	2.14	1.159	1.344
	14	283	1	6	609	2.15	1.348	1.817
	15	285	1	6	858	3.01	1.719	2.954
Subscale summary:				3688	2.59	1.03	1.060	
Overall Scale Summary:				10293	2.41	0.75	0.57	

Source: Field survey, 2018

4.11.1 Prevalence of HARSAD among the study population

In line with the first objective of the study, prevalence of HARSAD was calculated from the responses that expressed agreement [Somewhat Agree (4), Agree (5) and Strongly Agree (6)] with the MHPASS statements, implying exhibition of HARSAD tendencies.

It can be seen from table 4.11 that the total frequency of responses that expressed agreement with prejudicial statements (item 1-5) was 435 (30.53%), agreement with discriminatory statements was 189 (13.24%) and agreement with stereotypical statements was 407 (28.58%). On the whole scale, the total frequency of responses that expressed agreement with all MHPASS statements (item 1-15) was 1031(24.11%).

This implies that 30.53% of the respondents exhibited prejudice, 13.24% exhibited discrimination and 28.58% exhibited stereotypes while 24.11% exhibited all the three mechanisms of HARSAD. This is illustrated in the Venn diagram in figure 4.6

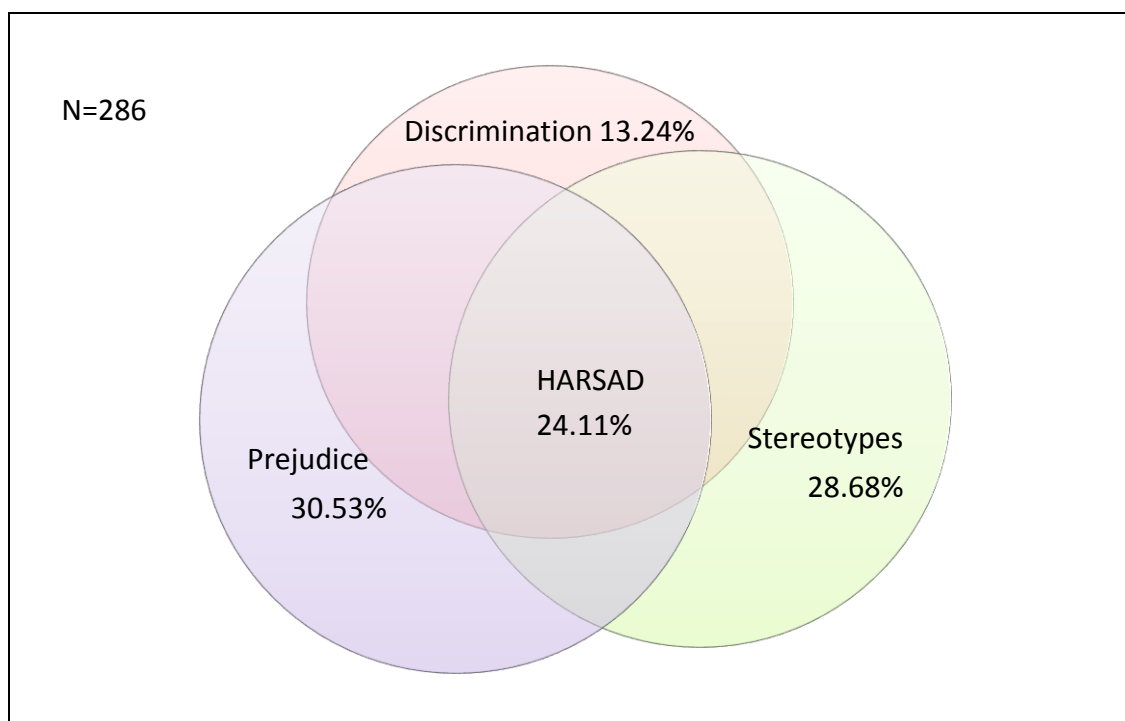


Figure 4.6: Prevalence of HARSAD among the respondents

A comparison of the mean scores of the three subscales as shown in table 4.12 shows that prejudice had the highest mean score ($\bar{x} = 2.61$) with standard deviation (SD=1.06), stereotypes had a mean score ($\bar{x} = 2.59$, SD =1.03) and discrimination had a mean score ($\bar{x} = 2.01$, SD = 0.87). The overall scale shows a mean score ($\bar{x} = 2.41$, SD = 0.75). In summary, the prevalence of HARSAD among the respondents was 24.11%. Prejudice was highest at 30.53% ($\bar{x} = 2.61$) followed by stereotypes at 28.58% ($\bar{x} = 2.59$) and lastly discrimination at 13.24% ($\bar{x} = 2.01$).

4.11.2 Association between HARSAD among the respondents and their demographic, professional characteristics and work experiences with PLWHA

In line with the second objective of the study, multiple linear regression analysis was performed to investigate whether HARSAD exhibited by the respondents could be predicted by their demographic characteristics (gender, age groups and levels of education), professional characteristics (years of nursing practice and ranks in nursing) and work experiences with PLWHA.

HARSAD scores on the MHPASS was entered as the outcome variable (OV) while all the other variables were entered as the combined predictor variable (PV). The assumptions of linear regression including linearity, normality, homoscedasticity and no multicollinearity were checked among the PVs. Linearity and homoscedasticity were checked with scatter plots while normality was checked with Q-Q plots generated from SPSS. Multicollinearity was checked with Pearson's bivariate correlation matrix between the PVs and age group was found to be collinear with years of practicing nursing ($r=0.8$). Age was therefore dropped from the analysis and all the other variables were entered as predictor variable (PVs) in the multiple linear regression analysis in SPSS using the enter method.

The multiple linear regression analysis produced various tables to aid explanation of the regression model including descriptive statistics, correlation, beta coefficients, ANOVA and model summary. These have been combined into two tables (table 4.13 and table 4.14) with only the relevant values needed for explaining the regression model shown.

Table 4.13 Descriptives, correlations and coefficients of the multiple regression model

	Descriptive statistics			Correlations (Pearson)		Unstandardized beta coefficients		
	Mean	SD	N	r	p-value	β	t	p-value
(Constant)						2.350	8.949	.000
Gender	1.12	.329	285	.078	.096	.114	.846	.398
Years of nursing practicing	3.20	1.705	285	-.190	.001**	-.077	-2.518	.012**
Nursing rank	3.41	2.538	285	-.136	.011**	.014	.511	.610
Educational Qualification	2.02	.780	285	-.142	.008**	-.128	-1.557	.121
Frequency of interaction with PLWHA	2.91	1.586	285	.036	.274	.026	.872	.384
Work in HIV/AIDS unit	1.54	.668	285	.124	.019**	.199	2.863	.005**

**P<0.05

Table 4.14: Model summary and ANOVA of the multiple regression model

	R	R Square	Adjusted R Square	Std. Error	
Model Summary	.271	.073	.053	.72974	
	Sum of Squares		df	F	P-value.
ANOVA	Regression	11.730	6	3.671	.002**
	Residual	148.041	278		
	Total	159.770	284		

**P<0.05

Table 4.13 displays the descriptive statistics of the PVs in relation to the OV, Pearson's correlations between the PVs with their significance levels (p-values) and the unstandardized beta coefficients (β) with their t-test values and significance levels (p-values). Table 4.14 shows the model summary and ANOVA of the multiple regression. The model summary displays the R and the R-Square (R^2) values while the ANOVA displays the degree of freedom (df), F-test value and significance level (p-value) of the regression model. Each of these values has significance in explaining the regression result.

Firstly, the model summary in table 4.14 shows the R value representing the correlation coefficient between the OV and the combined PVs which generally ranges between 0 and 1. The result ($R=0.27$) indicates that the strength of the correlation between the combined PVs and the OV is 0.27, implying that the correlation is weak. The R-Square value ($R^2=0.073$) indicates that the proportion of variation in the OV that could be explained by the regression model. This implies that the combined PVs could explain only 7.3% of the variation in HARSAD scores among the study population.

Secondly, the ANOVA in table 14.4 shows the F-test value (F), degree of freedom (df) and p-value of the regression model which are required for writing the regression equation and determining whether it can significantly predict the OV. The results show the F value ($F=3.67$) representing the strength of the combined PVs in predicting the OV, the degree of freedom (df) values comprising of the regression df (6) and the residual df (278) and the corresponding p-value (0.002) indicating the significance level of the model. Based on these values, the regression equation based on the general format:

$$F (\text{Regression df, Residual df}) = F\text{-Ratio, } p = \text{Sig becomes } F (6, 278) = 3.67, p=0.002$$

$P<0.05$ indicates that the regression model obtained can significantly predict the OV.

By implication, the combined effect of the PVs in the regression model has significant influence in predicting HARSAD among the study population.

Thirdly, the unstandardized beta coefficients values (β) and corresponding p-values for each of the variables in the PV in the regression model, shown in table 4.13 indicate the strength, direction and significance level of the influence of each of the variables in the model in predicting the OV (HARSAD among the respondents). The results show that:

1. The model had a constant unstandardized beta coefficient ($\beta=2.350$)
2. Gender had no significant influence in the model in predicting HARSAD among the respondents ($\beta= 0.114, p=0.39$)
3. Years of nursing practicing had significant inverse influence in the model in predicting HARSAD among the study population ($\beta= -0.077, p <0.05$). This means that a unit increase in years of nursing practice correlated with 0.077 decrease in HARSAD among the respondents.
4. Nursing rank had no significant influence in the model in predicting HARSAD among the respondents ($\beta= 0.014, p=0.61$).
5. Educational qualification had no significant influence in the model in predicting HARSAD among the respondents ($\beta= -0.128, p=0.121$).
6. Frequency of interaction with PLWHA had no significant influence in the model in predicting HARSAD among the respondents ($\beta= 0 .026, p=.384$).
7. Experience of working in HIV/AIDS unit had a significant direct influence in the model in predicting HARSAD among the respondents ($\beta= 0.199, p<0.05$). This means that a unit increase in experience of work in HIV/AIDS unit correlated with 0.199 increase in HARSAD among the respondents.

Based on these results, the final predictive model of the multiple linear regression was:

$$\text{HARSAD} = 2.350 + (0.114 * \text{gender}) + (-0.077 * \text{years of nursing practice}) + (0.014 * \text{nursing rank}) + (-0.128 * \text{educational qualification}) + (0.026 * \text{frequency of interaction with PLWHA}) + (0.199 * \text{work in HIV unit})$$

4.11.2 Association between HARSAD knowledge and HARSAD

In line with the third objective of the study, simple linear regression analysis was done between respondents' HARSAD scores on the MHPASS (outcome variable) and their HARSAD knowledge scores (predictor variable) to examine if HARSAD knowledge had any influence on perpetration of HARSAD. The results are shown in table 4.15

Table 4.15: Linear regression between HARSAD knowledge and HARSAD

Descriptive Statistics		Mean	SD	N	
	HARSAD	2.0524	.96010	286	
Knowledge	4.93	2.029	286		
Correlations		Pearson (r)	N	p-value	
	HARSAD	1.000	286	.	
Knowledge	-.032	286	.298		
Unstandardized beta coefficients		B	Std. Error	t	p-value
	(Constant)	2.126	.150	14.20	.000
Knowledge	-.015	.028	-.531	.596	
ANOVA		Sum of Squares	df	F	P-value.
	Regression	.261	1	.282	.596
	Residual	262.452	284		
Total	262.713	285			
Model Summary		R	R Square	Adjusted R ²	Std. Error
		.032	.001	-.003	.96132

From table 4.15, the result of Pearson's correlation shows an insignificant inverse correlation between HARSAD knowledge and HARSAD, $r(286) = -0.32$, $p\text{-value} = 0.289$. The results of the ANOVA shows that HARSAD knowledge is not a significant predictor of HARSAD, $F(1, 285) = 0.282$, $p=0.596$. The unstandardized beta coefficient shows an insignificant inverse correlation between HARSAD knowledge and HARSAD ($\beta = -0.015$, $p=0.596$).

The model summary shows that only 0.3% of variance is accounted for by the regression model. By implication, several evidences from the results of the linear regression have shown that the respondents' HARSAD knowledge had no influence on their perpetration of HARSAD against PLWHA.

4.11.3 Association between HARSAD and HIV Testing

In line with the fourth objective of the study, Chi-Square tests were conducted between respondents' HARSAD scores on the MHPASS and their history of HIV testing and HIV testing willingness to examine the relationship between the respondent's HIV testing and their perpetration of HARSAD against PLWHA. The results are shown in table 4.16.

Table 4.10 Chi-Square tests between HARSAD and HIV testing

HIV testing	Pearson Chi-Square			
	N	X ²	df	P-value
HARSAD				
HIV testing history	282	63.060	59	.335
HIV testing willingness	286	327.928	236	.000**
Prejudice				
HIV testing history	282	47.393	28	.012
HIV testing willingness	286	129.100 ^a	112	.129
Stereotypes				
HIV testing history	282	32.020	25	.157
HIV testing willingness	286	102.824	100	.403
Discrimination				
HIV testing history	282	22.189	19	.275
HIV testing willingness	286	138.370	76	.000**

**P<0.05

The result show that respondents HIV testing history had no significant relationship with HARSAD, X² (59, 282)=63.060, $p=0.335$, while HIV testing willingness had a significant relationship with HARSAD as a whole, X² (236, 286)=63.06, $p<0.05$. and discrimination X² (76, 286) =138.37, $p<0.05$. The results imply that pepertration of HARSAD was independent of the resopndents history of HIV testing. However, the respondents' willingness to test for HIV could predict their pepertration of HARSAD against PLWHA.

4.11.4 Summary of results

The study was aimed at finding out the prevalence of HARSAD among nurses, the influence of demographic, professional characteristics and work experiences of the nurses on their perpetration of HARSAD, their knowledge of HARSAD and its influence on their perpetration of HARSAD and the relationship between HIV testing and HARSAD.

In relation to the first objective, it was found that 24.11% of the nurses exhibited HARSAD tendencies. Prevalence of prejudice was highest at 30.53% ($\bar{x} = 2.61$) followed by stereotypes at 28.58% ($\bar{x} = 2.59$) and lastly discrimination at 13.24% ($\bar{x} = 2.01$).

In relation to the second objective, it was found that, the demographic, professional characteristics and work experiences of the nurses that significantly influenced their perpetration of HARSAD included age, years of practicing nursing and experience of working in HIV and AIDS unit/ward respectively.

In relation to the third objective, it was found that the nurses generally had a moderate level of knowledge about HARSAD. The knowledge was inversely related but did not have significant influence on their perpetration of HARSAD.

In relation to the fourth objective, it was found that 92% of the nurses' had done HIV test before but their history of testing had no significant relationship with their perpetration of HARSAD. 58.74% of the nurses were willing to do HIV test and their willingness was inversely related and significantly predicted their perpetration of HARSAD.

CHAPTER FIVE

DISCUSSION OF RESULTS

5.0 Introduction

This chapter presents the discussion of the results in relation to the study objectives and findings from previous studies. The study explored HARSAD exhibited by nurses against PLWHA in the Sekondi-Takoradi Metropolis of Ghana.

The study sought to find answers to the following research questions:

1. What is the prevalence of HARSAD among nurses in Sekondi-Takoradi?
2. What is the influence of demographic, professional characteristics and work experiences of the nurses on their perpetration of HARSAD?
3. What is the knowledge level of the nurses about HARSAD and how does it influence their perpetration of HARSAD?
4. What is the relationship between HIV testing and the mechanisms of HARSAD?

The answers to these questions make up the main sections of the discussion in line with the study objectives. Comparison of the findings with previous research findings helps to situate them into existing body of knowledge about HARSAD against PLWHA exhibited healthcare providers, particularly nurses. The discussion is eventually concluded with a review of the conceptual framework of the study and how the findings verify or disprove the assumptions of the framework.

5.1 Prevalence of HARSAD among nurses in Sekondi-Takoradi

The study found that 24.11% of the nurses exhibited HARSAD tendencies measured on the modified Health Care Provider HIV/AIDS Stigma Scale (MHPASS). In terms of the three sub-constructs of HARSAD, measured on the three subscales of the MHPASS prevalence of prejudice was highest at 30.53% ($\bar{x} = 2.61$), followed by stereotypes at 28.58% ($\bar{x} = 2.59$) and lastly discrimination at 13.24% ($\bar{x} = 2.01$).

It is worth pointing out the interesting finding that the prevalence of discrimination was less than half (13.24%) of the prevalence of stereotypes (28.58%) and prejudice (30.53%). What could account for such a wide gap between discrimination on one hand and stereotypes and prejudice on the other hand in the same population at the same time? This may be due to the differences in how discrimination is demonstrated from how stereotypes and prejudice are exhibited and the interplay of social desirability bias in how the respondents may have responded to questions on the three subscales of the MHPASS.

To begin with, the fact that discrimination is demonstrated overtly while prejudice and stereotypes are exhibited covertly could affect how the respondents responded to the statements on the three subscales. It will be recalled that prejudice refers to negative emotions and feelings towards PLWHA such as the feeling of discomfort around PLWHA, stereotypes refers to group-based beliefs about PLWHA such as the belief that all PLWHA are moral deviants, and discrimination refers to biased acts against PLWHA such as refusing to touch PLWHA. Since discrimination involves overt actions, its harmful effects tend to be more apparent unlike that of prejudice and stereotypes which are covert and do not present apparent harm to PLWHA.

Moreover, social desirability bias could have played on the differences in the demonstration of discrimination from exhibition of stereotypes and prejudice leading to differences in responses to the statements describing them on the MHPASS. Social desirability bias is the tendency of respondents to underreport their socially undesirable behavior when being investigated in research (Callegaro, 2011). It is possible that the respondents may have chosen more disagreements with discriminatory statements on the MHPASS in order not to appear be endorsing discrimination which infringes on nurses' professional code of conduct and makes them legally liable (Nyblade et al, 2005). However, they may have been more liberal in their choice of agreement with statements which described their stereotypical beliefs and prejudicial feelings towards PLWHA since they pose no apparent harm to patients and are not expressly prohibited in the professional code of conduct.

In summary, it is suspected that social desirability bias may have influenced respondents to underreport their discrimination more than their prejudice and stereotypes against PLWHA. This may explain the observed wide gap between prevalence of discrimination on one hand and stereotypes and prejudice on the other hand.

5.1.1 Comparison of findings with other study findings on prevalence of HARSAD

Sullivan's (2011) study of HARSAD among healthcare providers in Canada using the original Health Care Provider HIV/AIDS Stigma Scale (HPASS) did not specify percentage prevalence of HARSAD but found a mean score of 26.03 for stereotyping, 30.03 for discrimination and 12.82 for prejudice among nurses. It is observed that unlike this study which found discrimination to be lowest among the three HARSAD sub-constructs, discrimination was the highest among Sullivan's study population which

included 101 nurses. It must also be noted that, Sullivan used a 30-item scale with 13 items measuring prejudice, 11 measuring stereotypes and 6 measuring discrimination while this study used a modified version of the scale consisting of 15 items with 5 items each for prejudice, stereotypes and discrimination. Also, differences in social desirability bias towards discrimination between the two study-populations may account from such observed differences in ranking of discrimination. This brings into focus, differences in data collection procedure. Sullivan used online data collection procedure while this study involved physical distribution of questionnaire. According to Callegaro (2011), online collection of data could significantly reduce social desirability bias as compared to physical presence of the researcher during data collection.

Also, in the study of Alan (2017) among nursing students in Turkey comparing AIDS attitudes among first and final years students using the AIDS Attitude Scale (AAS) which assessed for three dimensions of AIDS attitudes including fear of contagion, negative feelings and professional resistance on a 6-point Likert scale, a mean score of 19.40 was found for fear of contagion, 12.44 for negative feelings and 15.01 for professional resistance among first year students and 16.76 for fear of contagion, 12.15 for negative feelings and 14.93 for professional resistance among fourth year students. Negative feelings is synonymous with prejudice while professional resistance involve avoidance of care for PLWHA which is synonymous with discrimination. On face value, it can be seen that discrimination ($\bar{x} = 15.01$) was higher than prejudice ($\bar{x} = 12.44$) in this study as well.

5.2 Influence of demographic, professional characteristics and work experiences of the nurses on their perpetration of HARSAD

The demographic, professional characteristics and work experiences of the nurses that were found to have significant relationships with the HARSAD included age, years of practicing nursing and history of working in HIV and AIDS unit/wards respectively.

Age was found to be collinear with years of practicing nursing which was found to be inversely correlated with HARSAD such that as age and years of nursing practice increased, HARSAD decreased. This means that perpetration of HARSAD was more prevalent among younger nurses than older nurses. Since advancing age goes along with advancing years of practicing nursing, it implies that HARSAD decreased as the nurses stayed longer on the ward. Hence longer periods of interaction of the nurses to PLWHA on the ward may have correlated with decreasing perpetration of HARSAD against them.

It was initially assumed from the conceptual framework that, working with in HIV/AIDS unit would mean so much frequent interaction with PLWHA that they would develop friendlier attitudes towards them but on the contrary it was found in this study that working in HIV and AIDS unit/ward rather had a positive correlation with HARSAD. It would have been thought that, working in HIV/AIDS unit would have the same correlation with longer years of nursing practice as both would involve more interactions with PLWHA. However, the observed difference in correlation of HARSAD with years of nursing practice and working in HIV/AIDS units/wards to point to the suggestion that duration in terms of years of interaction with PLWHA must be different from frequency of interaction with PLWHA resulting from working in HIV/AIDS unit/wards. The difference could also be due to the effect of collinearity of age with years of nursing

practice since age was found to be inversely correlated with HARSD as well. Age therefore becomes a confounding variable in this situation as it creates uncertainty as to whether there is inherent difference in frequency and duration of interaction with PLWHA or its just because of differences in age.

5.2.1 Comparison of findings with other study findings on association between HARSAD and personal characteristics

In his study among HCWs in Canada, Sullivan (2015) found statistically significant negative correlation between prejudice and occupational grade. This study found no correlation between nursing rank and HARSAD. Also, in their study among HCWs in Nigeria, Doka, Danjin and Dongs (2017) found no significant relationship between HARSAD and sex, and educational qualification. In this study gender and educational qualification had no correlation with HARSAD.

Also, in their study among HCWs in Bangladesh, Hossain and Kippax (2010) found that, level of discriminatory attitudes increased with male gender and age and decreased with higher educational qualification. This was similar to the findings of Harapan, et al. (2013) among HCWs in Indonesia where they also found that age was positively related to discriminatory attitudes. However this study rather found that increasing age correlated with decreasing HARSAD while education and gender had no effect on HARSAD. This is similar to Eo's (2011) finding in Nigeria where no significant association was found between stigmatizing attitudes and sex.

These comparisons reveal inconsistencies in findings at different places about the influence of personal characteristics on HARSAD. It is worthy to note however that, in this study, the male to female ratio was very large with 87.8% of the respondents being females and only 12.2% being males. It is possible that the small number of males as compared to females did not allow a fair comparison to be made for HARSAD perpetration by gender. Furthermore, differences in the study populations ranging from culture, sample size, mode of data collection and the instruments used in assessing HARSAD could have led to the inconsistencies in the findings from different studies. These point to the need to have universally accepted standardized instrument and methodology for measuring HARSAD globally or at least continentally.

5.3 Knowledge of HARSAD and its influence on perpetration of HARSAD

The objective in this study was firstly to assess the knowledge level of the nurses about HARSAD and secondly to examine whether the knowledge influenced HARSAD tendencies. Generally, a moderate knowledge level about HARSAD was found among the respondents. Precisely, 37.76% of them demonstrated high knowledge level, followed by 36.36% with moderate knowledge level and lastly 25.87% with low knowledge level.

The key finding was that HARSAD knowledge was not a significant predictor of HARSAD tendencies. This means that whether the nurses had high, moderate or low level of knowledge about nursing practices that constitute HARSAD did not influence their perpetration of HARSAD against PLWHA. In addition, no statistically significant relationships were found between respondents' knowledge of HARSAD and their gender, years of nursing practice, nursing rank, educational qualification, frequency of interaction with PLWHA, history of HIV testing and willingness to do HIV test, meaning that these

characteristics did not influence their level of knowledge about what constitute HARSAD. This means that the nurses' knowledge of HARSAD could not be predicted by the fact that they had level higher education, more years of nursing practice or were of higher rank in the professional nursing hierarchy. A lot of nurses may therefore engage in practices that are discriminatory against PLWHA without having insight about their unacceptable practices. Sometimes certain nursing practices are deemed to be normal when they are actually discriminatory against PLWHA.

On the other hand, statistically significant relationships were found between respondents' HARSAD knowledge scores and their age as well as history of work in HIV and AIDS units. This implies that the respondent's experience of working in HIV and AIDS units had strong influence on their knowledge of HARSAD. Previous work in HIV/AIDS unit correlated with higher knowledge level about practices that constitute HARSAD against PLWHA. This can be due to the fact that nurses who work in HIV/AIDS care units/wards usually get the opportunity to attend workshops about HIV stigma and discrimination reduction thereby raising their level of awareness about unacceptable nursing practices when caring for PLWHA.

5.2.1 Comparison of findings with other study findings on influence of knowledge of HARSAD on HARSAD perpetration

The knowledge studies obtained during literature review mostly focused on knowledge in the area of transmission and prevention of HARSAD rather than specifically examining HCWs knowledge of practices that constitute HARSAD. The finding that HARSAD knowledge had no significant influence on HARSAD perpetration is similar to the

findings of Chew and Cheong (2012) in their study among medical students in Malaysia in which knowledge of HIV/AIDS had no significant correlation with stigmatizing attitudes. Also Okumu et al. (2017) who examined the impact of HIV knowledge on HIV-related stigma and HIV testing among Black young adults in USA similarly found no significant influence of knowledge. Moreover, in the study of Eo (2011), knowledge of the National Workplace HIV Policy was examined and was found to have no significant influence on stigma.

However, in the study of Hossain and Kippax (2010) in Bangladesh, it was found that HARSAD levels decreased with greater knowledge of HIV transmission and prevention. Harapan, et al. (2013) also examined the effect of knowledge of HIV transmission and prevention on stigmatized and discriminatory attitudes among HCWs in Indonesia and found significant direct correlation between them. These findings raise inconsistencies in the findings on influence of knowledge on enactment of stigma

Generally, these findings point to the suggestion that having knowledge may not be enough to change behavior unless some other interventions are implemented in addition. For instance, the effect of smoking is well known and written boldly on cigarette packets but people still smoke. This does not however mean knowledge should be disregarded but rather, it should be combined with other behavior change interventions to help reduce HARSAD perpetration. Merely educating nurses about practices that constitute HARSAD in the care of PLWHA without rigorous behavior change interventions will not translate into better treatment of PLWHA.

5.3 Relationship between HIV testing and the mechanisms of HARSAD

Ninety two percent (92%) of the respondents had undergone testing for HIV before while 58.74% were willing to undergo HIV testing. This finding suggests that, having undergone HIV testing does not necessarily mean the person was really willing to do the test. Several factors may compel a person to do HIV testing out of necessity rather than personal willingness. For instance HIV testing may be needed for marriage purposes in some churches in Ghana so a person may be compelled to do as part of the marriage process. This is a possible reason for the vast difference HIV testing history and HIV testing willingness. Also the fact that 41.26% of the nurses were not willing to do HIV test is worrisome. The reason for this unwillingness could be the subject of further research.

Several studies have highlighted the negative influence of HARSAD on HIV testing (Chesney & Smith, 1999; Young & Bendavid, 2010; Koku, 2011). This study has added on to this existing knowledge with the finding that HIV testing willingness has significant correlation with the prevalence of discrimination such that nurses who are unwilling to test for HIV had higher prevalence of discrimination against PLWHA. It is therefore not only the fear of being stigmatized that makes people unwilling to test for HIV but also people who rather discriminate against PLWHA are unwilling to test. This confirms that the negative influence of the mechanisms of HARSAD on HIV testing as posited by Earnshaw and Chaudoir (2009) in their HIV Stigma Framework.

CHAPTER 6

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents the summary and conclusion of the study. It also outlines some recommendations for dealing with HARSAD against PLWHA exhibited by nurses based on the findings of the study.

6.1 Summary

The study was carried out to address the problem of HIV and AIDS related stigma and discrimination (HARSAD) against patients living with HIV and AIDS (PLWHA). HARSAD has been recognized as a major problem which militates against the control of HIV and AIDS. Its negative effects become more deleterious when it occurs in healthcare facilities where PLWHA go to receive treatment, care and support. This necessitates ongoing monitoring of the levels of HARSAD against PLWHA by healthcare workers to provide current information for dealing with it.

Paucity of current data on the levels of HARSAD by healthcare workers particularly nurses in Ghana was identified as a problem that needed to be addressed. This study was therefore conducted with the purpose of finding out the extent of HARSAD exhibited by nurses in the Sekondi-Takoradi Metropolitan Assembly (STMA) in the Western region of Ghana. The objectives were firstly, to measure the prevalence of HARSAD among the nurses, secondly, to find out the influence of demographic, professional characteristics

and work experiences of the nurses with PLWHA on their perpetration of HARSAD, thirdly to find out the knowledge of the nurses about HARSAD and its influence on their perpetration of HARSAD and finally to find out the relationship between HIV testing and the mechanism of HARSAD among the nurses.

Literature was reviewed on the theoretical development of the concept of stigma and discrimination, HARSAD, measurement of HARSAD and theories of HARSAD as well as previous studies on HARSAD exhibited by healthcare providers against PLWHA. The study was primarily based on the HIV Stigma Framework proposed by Earnshaw and Chaudoir (2009) which conceptualized HIV stigma as a process involving two pathways, one for people infected with HIV (PIHIV) and the other for people uninfected with HIV (PUHIV). This study focused on only the pathway for PUHIV which involve perpetration of SAD against PLWHA. According Earnshaw and Chaudoir (2009), this pathway is characterized by three mechanisms of stigma including prejudice, stereotypes and discrimination which lead to outcomes which impact on HIV testing, social distancing and policy support.

Further review of literature highlighted the Social Contact Theory of HIV stigma proposed by Attel (2013) and the Conceptual Model of HIV/AIDS stigma (CMHAS) propounded by Holzemer et al. (2007). Relevant concepts were borrowed from the theories reviewed and used to synthesize a unique conceptual framework for this research. The conceptual framework was underpinned by the assumptions that HARSAD exhibited by nurses against PLWHA is a process involving three main inter-related concepts including influencers of HARSAD, mechanisms of HARSAD and outcomes of HARSAD. The influencers of HARSAD included the nurses' demographic and

professional characteristics, level of social contact with PLWHA, knowledge of HARSAD and perception of HARSAD in their health facilities. The mechanisms of HARSAD included prejudice, stereotypes and discrimination and the outcomes of HRASAD included HIV testing, social distancing and advocacy. The inter-relationships among the concepts were assumed to be linear where the influencers impact on the mechanisms which in turn impact on the outcomes which reciprocally impact on the mechanisms.

In terms of methodology, the study was descriptive cross-sectional survey in design. The population of the study encompassed nurses in STMA numbering about 1067 from which a sample of 286 nurses was selected by convenience sampling from 5 hospitals selected purposively from all healthcare facilities in STMA. The study instrument was a structured questionnaire which was pre-tested and found to have a reliability Coefficient (Chronbach's alpha) of 0.71 and face validity checked by supervisors and expert researchers. Institutional and ethical approvals were obtained from the University of Ghana and Ghana Health Service (GHS) before data collection. The printed questionnaires were distributed to the sample on the basis of their availability and willingness. The questionnaires were self-administered with the paper-and-pen/pencil technique and returned within 24 hours. Data collection was done within 3 weeks from April to May 2018.

The questionnaire comprised of 3 sections and collected quantitative data. Section A collected data about respondents' demographic characteristics (gender, age groups and levels of education), professional characteristics (years of nursing practice and ranks in nursing), work experiences with PLWHA, history of HIV testing and willingness to

undergo HIV testing. Section B tested respondents' knowledge about HARSAD with ten closed ended questions with three option answers (Yes/No/Unknown). Section C assessed respondent's HARSAD tendencies with a modified version of the Healthcare Provider HIV/AIDS Stigma Scale (HPASS) developed by Wagner, Hart, Mcshane, Margolese and Girard (2014). The modified HPASS (MHPASS) consisted of 15-items, with 5 items each assessing for prejudice, stereotypes and discrimination on a 6-Point Likert Scale ranging from 1=strongly disagree to 6=strongly agree.

Data handling involved coding of the responses and entering into SPSS version 23 for statistical analysis. Data analysis involved generation of descriptive statistics including frequencies, percentages and measures of central tendencies to describe the composite responses. Chi-square tests, correlation analysis, analysis of variance (ANOVA) and linear regression were used to examine the relationships among relevant variables.

The results indicated that HARSAD was exhibited by 24.11% ($\bar{x} = 2.41$) of the nurses. Prevalence of prejudice was 30.53% ($\bar{x} = 2.61$), stereotypes was 28.58% ($\bar{x} = 2.59$) and discrimination was 13.24% ($\bar{x} = 2.01$). Multiple regression analysis of HARSAD against predictor variables revealed that significant predictors of HARSAD included years of practicing nursing ($\beta = -0.077$, $p < 0.05$) and experience of working in HIV and AIDS unit/wards ($\beta = 0.199$, $p < 0.05$). Age was collinear with years of nursing practice implying that, age was a significant predictor of HARSAD. Knowledge of HARSAD was generally moderate but its relationship with HARSAD was not significant ($r = -0.32$, $p\text{-value} = 0.289$). Finally of the three mechanisms of HARSAD, only discrimination was found to have significant correlation with HIV testing willingness, $X^2(76, 286) = 138.37$, $p < 0.05$.

6.2 Summary of findings

1. The first objective of the study was to measure the prevalence of HARSAD among nurses in STMA. It was found that 24.11% of the nurses exhibited HARSAD tendencies. Prejudice was most prevalent among the nurses at 30.53%, followed by stereotypes at 28.58% and lastly discrimination at 13.24%.
2. The second objective of the study was to find out the characteristics of the nurses that influence their perpetration of HARSAD. It was found that:
 - a. The demographic characteristic that influenced HARSAD was age
 - b. The professional characteristic that influenced HARSAD was years of nursing practice
 - c. The nurses experience of work in HIV and AIDS unit/wards also influenced their perpetration of HARSAD
3. The third objective of the study was to find out the nurses knowledge level about HARSAD and how it influence their HARSAD perpetration. It was found that 37.76% of the nurses had high knowledge level followed by 36.36% with moderate knowledge level and 25.87% with low knowledge level. Altogether, there was generally moderate HARSAD knowledge level among the nurses. However perpetration of HARSAD by the nurses was not predictable by their HARSAD knowledge level.
4. The fourth objective of the study was to find out the relationship between HIV testing and the mechanisms of HARSAD among the nurses. It was found that, out of the three mechanisms of HARSAD only discrimination was significantly predicted by willingness to do HIV testing among the nurses.

6.3 Conclusion

This study set out to answer the question, to what extent do nurses exhibit HARSAD against PLWHA in the STMA in the Western Region of Ghana? The extent of HARSAD exhibited by the nurses was determined by measuring the prevalence of HARSAD using a modified version of the Health Provider HIV/AIDS Stigma Scale.

It was found that 24.11% of the nurses exhibited HARSAD tendencies against PLWHA. Prevalence of the mechanisms of HARSAD, that is, prejudice, stereotypes and discrimination were found to be 30.53%, 28.58% and 13.24% respectively. These findings point to the conclusion that, there was unacceptably high prevalence of HARSAD exhibited by nurses against PLWHA in the STMA.

Based on the conceptual framework of the study, it was expected that the extent of HARSAD exhibited by the nurses would be influenced by their demographic, professional characteristics and level of social contact (work experiences) with PLWHA. It was found that perpetration of HARSAD by the nurses was predictable by their age, years of practicing nursing and experience of working in HIV/AIDS unit/wards. However, HARSAD was not predictable by gender, nursing rank, educational qualification or frequency of interaction with PLWHA.

In addition, according to the conceptual framework of the study, it was expected that the extent of HARSAD exhibited by the nurses would be influenced by their knowledge about HARSAD. However it was found that the nurses' level of knowledge about practices that constitute HARSAD did not have significant influence on their perpetration of HARSAD.

Lastly, it was expected that, as posited by Earnshaw and Chaudoir (2009) and reiterated in the conceptual framework of the study, the mechanisms of HARSAD, namely prejudice, stereotypes and discrimination would impact on HIV testing which was cited as an outcome of HARSAD. It was found that only discrimination was significantly correlated with willingness to undergo HIV testing among the nurses.

In a nutshell, the conceptual framework for the study was found to have fairly good applicability to HARSAD exhibited by nurses towards PLWHA in the STMA. However more studies are needed to fine tune it to make it applicable to different study populations and settings.

6.3 Recommendations

Based on the findings of the study, the following recommendations are suggested for tackling HARSAD exhibited by nurses in STMA against PLWHA. The recommendations have implications for policy formulation, planning for HIV and AIDS care, education of nurses and behavior change communication.

1. Immediate HARSAD reduction and prevention intervention should be started by the Ministry of Health in collaboration with the Ghana AIDS Commission, Ghana Health Service and National AIDS Control Program in health facilities in the STMA due to the unacceptably high prevalence of HARSAD currently existing among the nurses as established by this study.
2. Since perpetration of HARSAD is more prevalent among younger nurses, HARSAD reduction and prevention interventions should focus more on young nurses.
3. HARSAD reduction training should be done for all nurses working in HIV/AIDS units/wards in since prevalence of HARSAD was found to be higher among them.

4. HARSAD reduction interventions should focus equally on male and female nurses since they have no significant differences in perpetration of HARSAD.
5. HARSAD reduction interventions should focus equally on junior rank and senior rank nurses since they have no significant differences in perpetration of HARSAD.
6. HARSAD reduction interventions should focus equally on nurses with higher education and those with lower educational qualifications since there are no significant differences in their perpetration of HARSAD
7. The moderate knowledge level about HARSAD among the nurses draws attention to the need to organize workshops for nurses in the STMA to educate them about HARSAD as some of them are not aware about the stigmatizing and discriminating effects of some of their practices when caring for PLWHA.
8. Educational interventions to raise the knowledge level of nurses about HARSAD should be focused equally on all nurses irrespective of their gender, years of nursing practice, nursing rank, educational qualification or frequency of interaction with PLWHA as there were no significant differences among them in relation to HARSAD knowledge.
9. Educational interventions to raise the knowledge level of nurses in STMA about HARSAD should be cognizant of the nurses age and experience of work in HIV/AIDS units/wards. Older nurses and those with such experience could be used as peer-educators as they have more knowledge about HARSAD as the findings of the study indicate.
10. The finding that the nurses knowledge of HARSAD does not translate into reduction of HARSAD draws attention to the urgent need for behavior change communication

in health facilities in Sekondi-Takoradi for nurses to encourage change of their behavior and negative feelings and beliefs about PLWHA.

11. Due to the multiplicity of scales for measuring HARSAD identified during literature reviews, it is suggested that a single nationally adopted HIV and AIDS stigma scale should be developed for monitoring of HIV stigma in all health facilities in Ghana to ensure uniformity and consistency. Reports on the monitoring of HARSAD in health facilities should be incorporated into their annual and periodic reviews.

6.3.1 Recommendations for future research

This study has revealed some problems that could be the subject of further study. Firstly, it was found during literature review that, most studies that assessed knowledge focused on HIV transmission and prevention knowledge. There is the need to assess healthcare workers knowledge of practices that constitute HARSAD to establish their level of insight about common stigmatizing and discriminatory practices in the care of PLWHA.

Also, it was found that the nurses' knowledge of HARSAD did not necessarily translate into reduced perpetration of HARSAD. Investigation into why this is so, will help to address this challenge in order to make education of the nurses about HARSAD an effective intervention for reducing HARSAD perpetration against PLWHA.

Furthermore, the conceptual framework developed for this study cited perception of HARSAD in the health facility as an influencer of HARSAD. This could be examined in future studies to add to knowledge about the influencers of HARSAD. Finally, an expansion of this study across all regional hospitals in Ghana is suggested to assess HARSAD perpetration by nurses against PLWHA across the whole country.

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APPENDICES

APPENDIX A

ETHICAL APPROVAL LETTER FROM UNIVERSITY OF GHANA



UNIVERSITY OF GHANA

ETHICS COMMITTEE FOR THE HUMANITIES (ECH)

P. O. Box LG 74, Legon, Accra, Ghana

My Ref. No.

21st February, 2018

Mr. Eric Offei Affedzie
Department of Adult Education and Human Resources Studies
University of Ghana
Legon

Dear Mr. Affedzie,

ECH 091/17-18: HIV AND AIDS RELATED STIGMA AND DISCRIMINATION: A STUDY OF NURSES IN HEALTHCARE FACILITIES IN THE SEKONDI-TAKORADI METROPOLIS OF GHANA

This is to advise you that the above reference study has been presented to the Ethics Committee for the Humanities for a full board review and the following actions taken subject to the conditions and explanation provided below:

Expiry Date: 20/08/18
On Agenda for: Initial Submission
Date of Submission: 15/01/18
ECH Action: Approved
Reporting: Quarterly

Please accept my congratulations.



Yours Sincerely,

Rev. Prof. J. O. Y. Mante
ECH Chair

CC: Prof. Olivia A. T. F. Kwabong, Department of Adult Education and Human Resources Studies, University of Ghana.

APPENDIX B

ETHICAL APPROVAL LETTER FROM GHANA HEALTH SERVICE

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

*In case of reply the
number and date of this
Letter should be quoted.*



Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: ghserc@gmail.com
17th March, 2018

MyRef: GHS/RDD/ERC/Admin/App/18/84
Your Ref. No.

Eric Offei Affedzie
University of Ghana
Department of Adult Education and Human Resources Studies
School of Continuing and Distance Education

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	GHS-ERC: 014/02/18
Project Title	HIV and AIDS Related Stigma and Discrimination Exhibited by Nurses in the Sekondi-Takoradi Metropolis of Ghana
Approval Date	17 th March, 2018
Expiry Date	16 th March, 2019
GHS-ERC Decision	Approved

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report **after completion** of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
DR. CYNTHIA BANNERMAN
(GHS-ERC CHAIRPERSON)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

APPENDIX C

INTRODUCTORY LETTER



UNIVERSITY OF GHANA
DEPARTMENT OF ADULT EDUCATION AND
HUMAN RESOURCE STUDIES
SCHOOL OF CONTINUING AND DISTANCE EDUCATION

DAEHRS/001

December 13, 2017

Ref. No.:

TO WHOM IT MAY CONCERN

LETTER OF INTRODUCTION – ERIC OFFEI AFFEDZIE (SID NO. 10244336)

Mr. Eric Offei Affedzie is an MPhil. student of the Department of Adult Education and Human Resource Studies, School of Continuing and Distance Education, College of Education, University of Ghana, Legon.

He is undertaking a study in connection with his MPhil Thesis (**HIV and AIDS Related Stigma and Discrimination Exhibited by Nurses in the Sekondi-Takoradi Metropolis of Ghana**) which requires contacting institutions and organizations for data.

I should be very grateful if you would give him the needed assistance.

Thank you.


Prof. Olivia A. T. F. Kwapong
Head of Department

COLLEGE OF EDUCATION

JisL

• Tel: +233 (0) 303 938 853

P.O. Box 31, Legon, Accra, Ghana.

• Email: aehrs@ug.edu.gh

• Website: www.coe.ug.edu.gh

APPENDIX D

PROTOCOL CONSENT FORM 1



UNIVERSITY OF GHANA



Official Use only
Protocol number

Ethics Committee for Humanities (ECH)

PROTOCOL CONSENT FORM

Section A- BACKGROUND INFORMATION

Title of Study:	HIV and AIDS related stigma and discrimination exhibited by nurses in the Sekondi-Takoradi Metropolis of Ghana
Principal Investigator:	Eric Offei Affedzie
Certified Protocol Number	ECH 091/17-18

Section B- CONSENT TO PARTICIPATE IN RESEARCH

General Information about Research

This research is a study of HIV and AIDS related stigma and discrimination (SAD) exhibited by nurses against patients living with HIV and AIDS in the Sekondi-Takoradi Metropolis of Ghana

The purpose of this study is to find out the prevalence of HIV and AIDS related SAD among nurses, nurses' knowledge of what constitutes HIV and AIDS related SAD against patients living with HIV and AIDS and nurses' perception of severity of HIV and AIDS related SAD exhibited by nurses against patients living with HIV and AIDS.

It involves the use of a structured questionnaire to gather data from nurses. As a respondent, you will only take a few minutes in completing the questionnaire, about 30 minutes maximum

Benefits/Risks of the study

Findings from this study will help in planning appropriate strategies and interventions for eliminating HIV and AIDS related stigma and discrimination exhibited by nurses against patients living with HIV and AIDS.

No vulnerable or underage respondent will be used in this study. No invasive procedure will be used in collecting data and the data to be collected will be non-intrusive. No foreseeable risks or hazards to respondents are expected. As a respondent, in case you become psychologically distressed while completing the questionnaire, it shall be discontinued immediately.

Confidentiality

Direct access to the completed questionnaires is limited to only the researcher and 5 colleague nurses who will assist in questionnaire distribution and retrieval. Thus by signing consent form to participate as a respondent, you are authorizing access to only the researcher and 5 assistants.

As a respondent, you will be kept anonymous by avoiding recording of your name or any identity information. Your responses as an individual will also be kept anonymous. Only the finally analyzed data of all responses will be published.

Compensation

As a voluntary respondent, you will be given a thank you gift of 2 pens (a red and a blue BIC pen) after completing and handing in the questionnaire that will be given to you

Withdrawal from Study

As a respondent, you can choose to withdraw from answering the questionnaire without giving any explanation or suffering any consequences if you at any time they feel uncomfortable about the questions or the study

Contact for Additional Information

You can contact the researcher, Eric Offei Affedzie on phone (0240159185) or by email (Kukweric@yahoo.com). The researcher is a registered nurse working at International SOS Clinic in Bogoso and a graduate student at University of Ghana, Department of Distance Education

If you have any questions about your rights as a research participant in this study you may contact the Administrator of the Ethics Committee for Humanities, ISSER, University of Ghana at ech@isser.edu.gh / ech@ug.edu.gh or 00233- 303-933-866.

Section C- PARTICIPANT
AGREEMENT

"I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and am willing to give consent for me, my child/ward to participate in this study. I will not have waived any of my rights by signing this consent form. Upon signing this consent form, I will receive a copy for my personal records."

Name of Participant

Signature or mark of Participant

Date

APPENDIX E

PROTOCOL CONSENT FORM 2, GHANA HEALTH SERVICE

CONSENT FORM FOR NURSES

"I certify that I have read the research information sheet, asked questions and received answers regarding participation in this study to my satisfaction and willingly give consent to answer the questionnaires for this study.

Signature of Participant _____

Date_____

Principal Investigators statement and Signature

I, Eric Offei Affedzie, as the Principal Investigator (PI) of this study have ensured that the participant have been given clear explanation of the research and allowed to read the participant information sheet and given his/her voluntary consent to participate in the study before responding to the questionnaire

.....

Eric Offei Affedzie

(Principal Investigator)

Date_____

APPENDIX F

RESEARCH INSTRUMENT

(STRUCTURED QUESTIONNAIRE)

**HIV AND AIDS RELATED STIGMA AND DISCRIMINATION: A STUDY OF
NURSES IN THE SEKONDI-TAKORADI METROPOLIS OF GHANA**

APRIL / MAY 2018

Questionnaire Number:			
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PARTICIPANT INFORMATION SHEET FOR NURSES

Title of the Study

HIV and AIDS related stigma and discrimination (SAD): A study of nurses in healthcare facilities in the Sekondi-Takoradi Metropolis of Ghana

Introduction

I am a registered general nurse and graduate student of university of Ghana. I am conducting a research about HIV and AIDS related stigma and discrimination (SAD) exhibited by nurses in healthcare settings for my Master of Philosophy (MPhil) research project at University of Ghana.

Background of the Study

HIV and AIDS related stigma and discrimination (SAD) against people living with HIV and AIDS (PLWHA) is a major problem which militates against the control and prevention of HIV and AIDS. This is more so when it is perpetrated by healthcare providers who are supposed to provide care for patients living with HIV and AIDS. The magnitude of HIV and AIDS related SAD exhibited by nurses in healthcare settings has been underexplored. This research seeks to assess the prevalence, knowledge and perception of extent and severity of HIV and AIDS related stigma and discrimination (SAD) exhibited by nurses against patients living with HIV and AIDS.

Nature of the Study

This is a quantitative, descriptive and cross-sectional survey research. It involves the use of a questionnaire to gather numerical data to quantify the prevalence, knowledge and perception of extent and severity of HIV and AIDS related SAD against PLWHA exhibited by nurses.

Purpose of the Study

The purpose of this study was to find out the level of HIV and AIDS related stigma and discrimination (SAD) exhibited by nurses against patients living with HIV and AIDS (PLWHA) in the Sekondi-Takoradi Metropolis of Ghana.

Objectives of the Study

- To measure the prevalence of HIV and AIDS related SAD among nurses in Sekondi-Takoradi
- To find out the level of knowledge of nurses in Sekondi-Takoradi about what constitutes HIV and AIDS related SAD against patients living with HIV and AIDS
- To find out the perception of nurses in Sekondi-Takoradi about the extent of HIV and AIDS related SAD exhibited by nurses against patients living with HIV and AIDS

Participants' Involvement

The target participants for this study are nurses (registered and enrolled nurses) working in selected hospitals within the Sekondi-Takoradi Metropolis. Participants will be required to answer questionnaires about HIV and AIDS related SAD in nursing care. The answering of the questionnaire is expected to last about 20 minutes. The collection of data will span over 4 weeks duration.

Data to be Collected

This questionnaire comprises of four (4) sections. Section A collects respondents' demographic data, history of work with patients living with HIV and AIDS, HIV testing history and willingness to do HIV test. Section B tests respondents' knowledge of what constitute HIV and AIDS related SAD against patients living with HIV and AIDS. Section C assesses respondents' perception of severity of HIV and AIDS related SAD exhibited by nurses against patients living with HIV and AIDS. Section D assesses respondents' HIV and AIDS related stigma attitudes, opinions and discriminatory behavior towards patients living with HIV and AIDS.

Benefits of the Study

This study will yield valuable information that will help in planning appropriate strategies and interventions for eliminating HIV and AIDS related stigma and discrimination in the nursing care of patients living with HIV and AIDS.

Potential Risks/Hazards

The data to be collected with this instrument is mostly non-invasive. No foreseeable risks or hazards to respondents in this study are expected. The respondent will sacrifice about 20 minutes of their time to answer the questionnaire.

Voluntary Participation

Your participation as a questionnaire respondent for this study is absolutely voluntary with informed consent. You may choose not to participate without giving any explanation

Withdrawal from Study

As a respondent, you can choose to withdraw from answering the questionnaire without giving any explanation or suffering any consequences if you at any time they feel uncomfortable about the questions or the study

Confidentiality

The answered questionnaire will be kept under lock and key with direct access limited to only the researcher. Respondents will be kept anonymous by avoiding recording of your name or any identity information. Only the finally analyzed data of all responses will be published.

Compensation

As a voluntary respondent, you may be given a thank you gift of 2 pens (a red and a blue pen) after completing and handing in the questionnaire that will be given to you

Funding Information

The research is self-funded by the researcher as his own school research project

Conflict of Interest

No conflict of interest is envisaged for this study. Data to be generated will be solely used for the purpose of this study and will not be shared with any organization or other researchers.

Who to Contact for Further Information

For any further information about this study, you can contact:

1. The researcher, Eric Offei Affedzie: 0240159185, Email: Kukweric@yahoo.com
2. Supervisor: Dr. Clara O. Benneh: 0208181304, Email: cbenneh9@yahoo.com
3. Supervisor: Dr. Daniel Oduro-Mensah: 046419225, Email: doduro-mensah@ug.edu.gh
4. Hannah Frimpong, Administrator, Ghana Health Service Ethics Review Committee, 0507041223

QUESTIONNAIRE

Preamble

I am a registered general nurse and graduate student of university of Ghana. I am conducting a research about HIV and AIDS related stigma and discrimination (SAD) exhibited by nurses in healthcare settings for my Master of Philosophy (MPhil) research project at University of Ghana.

This questionnaire assesses your opinions, attitudes, knowledge and perceptions about HIV and AIDS related stigma and discrimination (SAD) in the nursing care of patients living with HIV and AIDS. Findings from this study will help in planning appropriate interventions for eliminating HIV and AIDS related SAD in patient care. The questions are non-invasive. You will spend about 20 minutes to answer the questionnaire. Your participation is voluntary and you can choose to withdraw your participation at any time.

This questionnaire comprises of 4 sections with their instructions. Kindly circle the answer of your choice from the options given or write your answer as applicable. For any further information about this study, you can contact the researcher, Eric Offei Affedzie on phone 0240159185 or by email Kukweric@yahoo.com

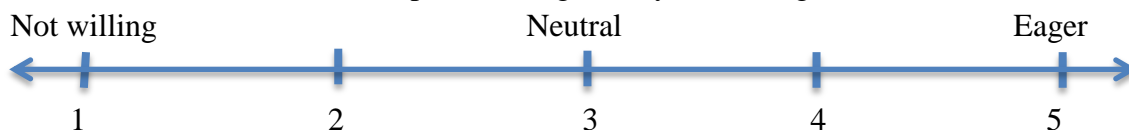
Thank you

SECTION A: DEMOGRAPHIC DATA

Please choose an answer from the options given or write your answer as applicable

1. Gender: Male Female
2. Age: 18-25[] 26-30[] 31-35[] 36-40[] 41-45[] 46-50[]
Please specify if your age falls outside the ranges provided_____
3. Number of years of practicing nursing:_____
4. What is your current grade (rank) in nursing? _____
5. Nursing qualification: Choose your current highest nursing education qualification
Enrolled Nurse [] Diploma [] First Degree [] Postgraduate []
6. How often do you interact with patients whom you are aware of being HIV+ at work?
 Every working day 1-3 in a week Less than 4 in a month
 Once in a while Rarely I do not know
7. Which of these best describe your history of work in HIV and AIDS care
 - a. I have never worked in HIV/AIDS specialty care unit before
 - b. I have worked in HIV/AIDS specialty unit in the past
 - c. I currently work in HIV/AIDS specialty unit
8. Which of these best describes your current nursing work?
 - a. I give care solely to People Living with HIV and AIDS (PLWHA)
 - b. I give general nursing care to all patients regardless of HIV status
 - c. I provide HIV/AIDS services including counseling and testing, treatment, care, support and prevention services to all categories of patients
9. Have you personally undergone HIV testing before? **YES** **NO**

10. Please **rate your willingness to undergo HIV testing now** on a scale of 1 to 5 below where 1 means you are not willing at all and 5 means you are eager to do HIV testing. Circle the number which best depicts the degree of your willingness level



SECTION B

KNOWLEDGE ABOUT HIV-RELATED STIGMA AND DISCRIMINATION

Please indicate whether each of the statements below constitutes HIV/AIDS stigma and discrimination (SAD) against people or patients living with HIV and AIDS (PLWHA) by circling ‘Y’, ‘N’ or ‘U’ against the statement as explained in the options below.

Option		Meaning
N	NO	Does NOT constitute HIV/AIDS stigma and discrimination
Y	YES	Constitutes HIV/AIDS stigma and discrimination
U	Unknown	You don’t know whether it is HIV/AIDS SAD or not

- | | | |
|----|--|-------|
| 1 | How you feel about HIV+ and AIDS patients can constitute HIV/AIDS-related stigma and discrimination even if you don’t show it | Y N U |
| 2 | During wound dressing, people who don’t have HIV or AIDS are treated first before treating PLWHA | Y N U |
| 3 | Using a special code name to refer to a person with diagnosis of HIV or AIDS to conceal their HIV status from other people | Y N U |
| 4 | Referring HIV/AIDS patients to other health facilities or other staff even though the level of care they need is within your competency level | Y N U |
| 5 | Designating a special ward or beds only for admitting HIV+ and AIDS patients | Y N U |
| 6 | Wearing gloves when performing activities for which you would not have worn gloves if the patient did not have HIV or AIDS | Y N U |
| 7 | HIV/AIDS-related stigma and discrimination includes what you think about HIV+ and AIDS patients even if you don’t speak about it | Y N U |
| 8 | Labeling the folder of PLWHA with a special mark or using a unique folder for them to alert other healthcare team members that the patient has HIV or AIDS | Y N U |
| 9 | Only the actions you manifest towards HIV+ and AIDS patients can be described as HIV/AIDS-related stigma and discrimination | Y N U |
| 10 | Refusing to tell the relatives of PLWHA about their HIV+ status | Y N U |

SECTION C

MODIFIED HEALTHCARE PROVIDER HIV/AIDS STIGMA SCALE (MHPASS)

Below is a list of ideas about HIV+ patients. Use the scale below to indicate the extent to which you agree or disagree with each statement. Circle the number that depicts your level of agreement or disagreement

1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

1	HIV+ patients present a threat to my health.	1	2	3	4	5	6
2	I would rather not come into physical contact with HIV+ patients.	1	2	3	4	5	6
3	I would wear two sets of gloves when examining HIV+ patients.	1	2	3	4	5	6
4	I worry about contracting HIV from HIV+ patients.	1	2	3	4	5	6
5	HIV+ patients make me uncomfortable.	1	2	3	4	5	6
6	I believe I have the right to refuse to treat HIV+ patients for the safety of other patients.	1	2	3	4	5	6
7	I believe I have the right to refuse to treat HIV+ patients if other staff members are concerned about safety.	1	2	3	4	5	6
8	I believe I have the right to refuse to treat HIV+ patients if I feel uncomfortable.	1	2	3	4	5	6
9	I believe I have the right to refuse to treat HIV+ patients to protect myself.	1	2	3	4	5	6
10	I would avoid conducting certain risky procedures on HIV+ patients.	1	2	3	4	5	6
11	Most HIV+ patients acquired the virus through risky behaviour	1	2	3	4	5	6
12	HIV+ patients tend to have numerous sexual partners.	1	2	3	4	5	6
13	I often think HIV+ patients have caused their own health problems	1	2	3	4	5	6
14	I tend to think that HIV+ patients do not share the same values as me.	1	2	3	4	5	6
15	HIV+ patients who have acquired HIV through sex are more at fault for contracting HIV than HIV+ patients who have acquired HIV through a blood transfusion.	1	2	3	4	5	6

