

CHRISTIAN SERVICE UNIVERSITY COLLEGE, KUMASI

AN INQUIRY INTO THE AVAILABILITY, USE AND IMPACT OF HIV

POLICY

AT WORKPLACES IN CONTEMPORARY GHANA

BY

JAMES ANKRAH APPIAH

(16010411)

DISSERTATION SUBMITTED TO THE DEPARTMENT OF PLANNING
AND DEVELOPMENT OF THE FACULTY OF HUMANITIES, CHRISTIAN
SERVICE UNIVERSITY COLLEGE, KUMASI, IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE
DEGREE IN MONITORING AND EVALUATION

SEPTEMBER 2023

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature Date

Name: James Ankrah Appiah

Supervisor's Declaration

I hereby declare that the preparation and presentation of this thesis was supervised following the guidelines on supervision of thesis writing laid down by the Christian Service University College

Supervisor's Signature Date

Name: Dr. Charles Osei Dwumfour

ABSTRACT

The workplace is significant for the implementation of HIV prevention programs. For this reason, the Ghana AIDS Commission and the National Tripartite Committee have so far formulated two workplace HIV policies, one in 2005 and another in 2012 with the aim of ensuring that institutions adopt the policy and implement same for their staff. This study sought to investigate the availability, utilization and impact of workplace HIV policy in Ghana. The study employed a mixed method cross sectional design, drawing samples from the security services, MMDAs and senior high schools. In this study only 6.06% of the 330 participants (representing their institutions) had a policy and these were practically all senior high schools. The main reason cited for the absence of a policy was the lack of awareness which accounted for 65.76% of the reasons. Other reasons included that some participants felt it was unnecessary (19.09%) to have a stand-alone policy on HIV at the workplace; others did not know how to get the policy in place (11.52%) and the perception that policies are expensive to formulate and implement was the least reason given (3.64%). Availability of workplace HIV policy marginally affected the presence of HIV related stigma and discrimination, staff retrenchment and AIDS related deaths at the workplaces studied. While no report of these problems were found among the 6.06% of institutions that had a policy, almost 5% of the remaining 93.04% of the institutions without a policy experienced these challenges at the workplace, and this obviously affected staff wellbeing and productivity. GAC as the coordinator of the national HIV response should advocate strongly for public sector institutions to adopt and implement the policy to help reduce new infections, to protect the rights of workers and promote national development. Legislation of the policy is recommended.

KEY WORDS

Availability

Discrimination

Dissemination

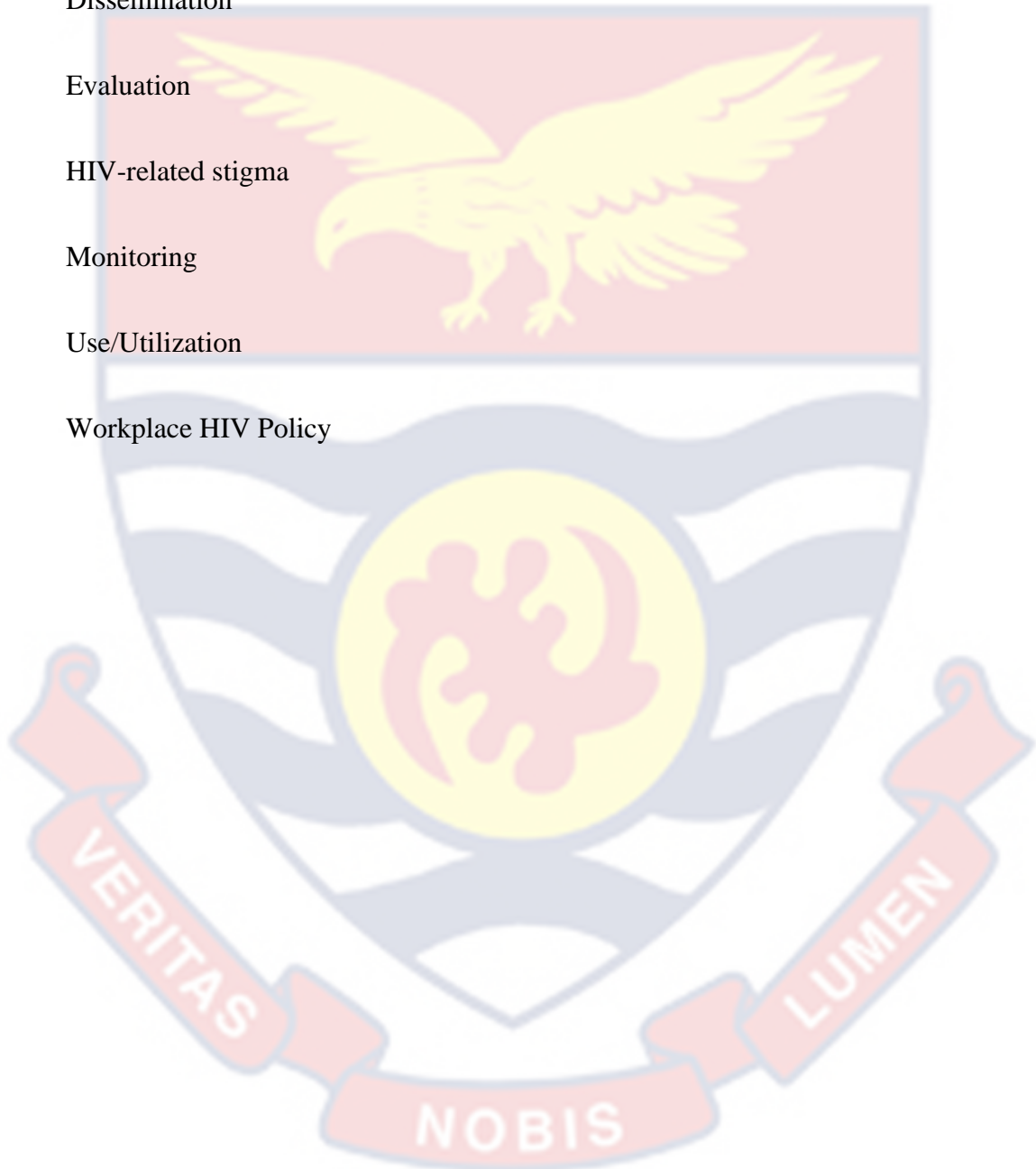
Evaluation

HIV-related stigma

Monitoring

Use/Utilization

Workplace HIV Policy



ACKNOWLEDGEMENTS

I foremost wish to acknowledge the sustenance of Jehovah God, the Almighty who saw me through this academic journey from start to finish. I am deeply grateful to my family for the support and encouragement throughout the program. I appreciate my supervisor, Dr. Charles Osei Dwumfour his patience, swift review and feedback during the research process and encouragement, which altogether gave me the motivation to cope with the demands of research alongside course work.

My sincere appreciation goes to all my friends working in various institutions who led me to several security service personnel to answer the questionnaire in the study sites. I am grateful to my longtime friend Peter Asa Manu with the Ghana National Fire Service and my former student John Ernest Bakah with the Ghana Army, currently in Lebanon. My good friend and brother Mohammed Fuseini with the Customs Division in Damongo; Abraham Nyamekye with the Kumasi Central Police Command; my own boss Miss Olivia Graham of Ghana AIDS Commission for leading me to officers at the Kumasi Central Prison.

I cannot forget to thank Rev. Emmanuel Addo, Ashanti Regional School Health Coordinator (GES) for helping me to administer questionnaire among administrators and heads Senior High Schools; Randy Amoako Acheampong and Lawrence Butler at Greater Accra and Ashanti RCCs for leading me to MMDA human resource persons; Mr. Kwadwo Agyemang with the KMA, Subin Sub-Metro; Kingsford Koranteng and Gideon Owusu-Mensah, both in the United States of America for your support during the program. Finally, a big thank you to my beautiful wife, Akorfa for all the support. May Jehovah reward accordingly, all who helped in diverse ways to make this work possible.

I acknowledge that any mistakes and omissions herein are my sole responsibility.

DEDICATION

To my parents, and to little Oparebea.

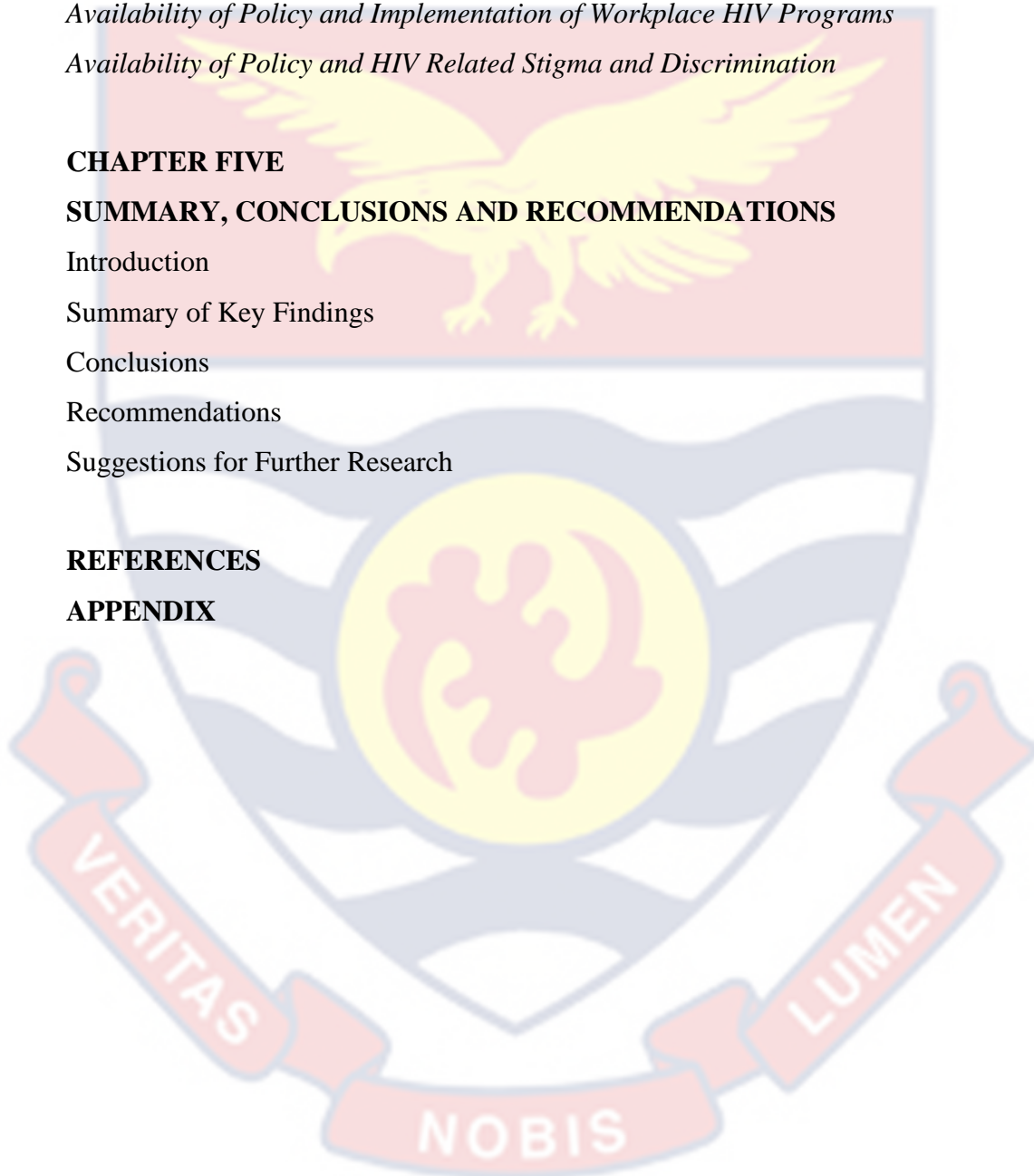


TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ACRONYMS	xii
CHAPTER ONE	1
INTRODUCTION	1
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	6
Research Objectives	6
Research Questions	7
Research Hypothesis	7
<i>Hypothesis 1</i>	7
<i>Hypothesis 2</i>	8
Significance of the Study	8
Delimitation	9
Limitations	9
Definition of Terms	9
Organization of the Study	10
CHAPTER TWO	12
LITERATURE REVIEW	12
Introduction	12
Functionalist Theory	12
Sick Role Theory	14
Review of Concepts	16

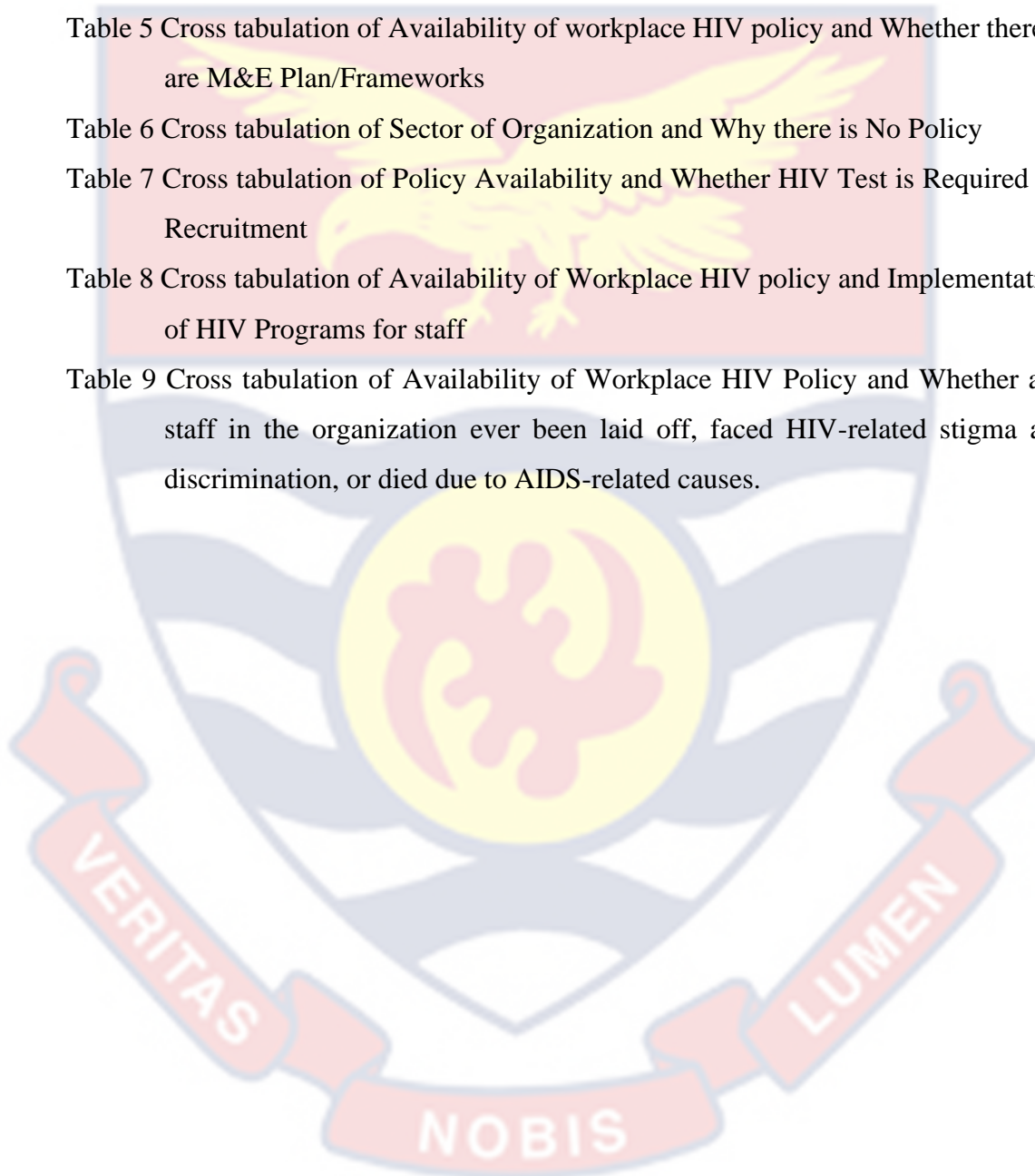
Conceptual Review	17
Background to Social Policy	17
Availability of Workplace HIV Policy in Ghana	18
Workplace HIV Policy in Ghana's HIV Response	20
Formulation of Workplace HIV Policy	22
Dissemination and Use of Workplace HIV Policy	23
Conceptual Framework	24
Chapter Summary	25
CHAPTER THREE	27
RESEARCH METHODS	27
Introduction	27
Research Design	27
Study Area	27
<i>Greater Accra Region</i>	28
<i>Ashanti Region</i>	29
<i>Northern Regions (Savannah, Northern and North East Regions)</i>	31
Population	31
Sampling Procedure	32
Sampling Frame	34
Sample Size	34
Data Collection Instruments	36
Data Collection Procedure	36
Pre-Testing the Instrument	37
Data Processing and Analysis	37
CHAPTER FOUR	38
RESULTS AND DISCUSSIONS	38
Introduction	38
Background of the Institutions	38
<i>Staff Strength of Institutions</i>	39
<i>Age of Institutions</i>	40
Availability of Workplace HIV Policy	40
Assistance to Obtain a Policy	43

Alignment of Policies with GAC's Workplace HIV Policy	44
Utilization of Workplace HIV Policy	44
Monitoring and Evaluation of Workplace HIV Policy	46
Bivariate Analyses	48
<i>Availability of Policy and HIV Test Requirement</i>	48
<i>Availability of Policy and Implementation of Workplace HIV Programs</i>	49
<i>Availability of Policy and HIV Related Stigma and Discrimination</i>	52
CHAPTER FIVE	54
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	54
Introduction	54
Summary of Key Findings	54
Conclusions	56
Recommendations	58
Suggestions for Further Research	59
REFERENCES	60
APPENDIX	66



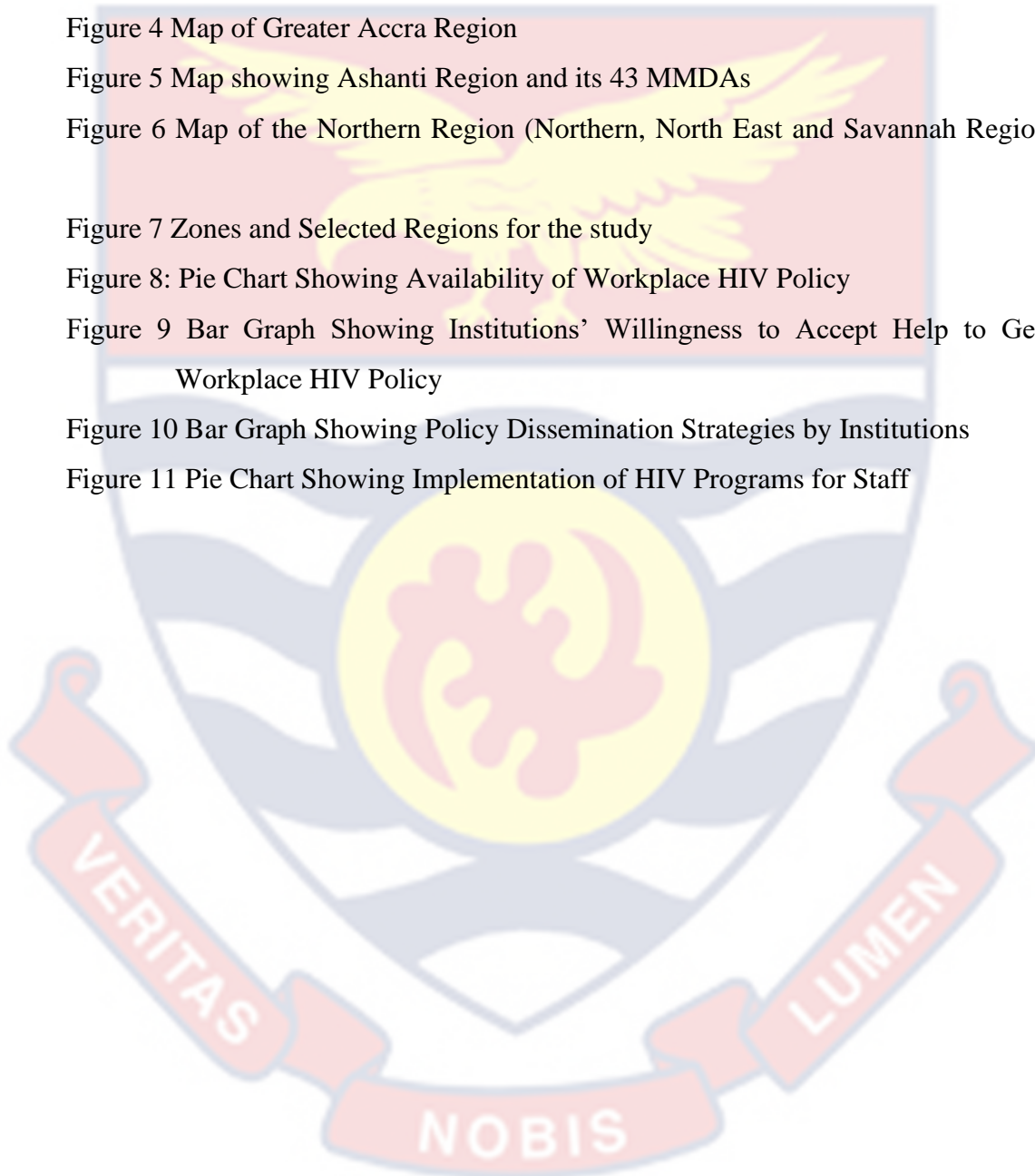
LIST OF TABLES

Table 1 Actual Number of Participants Per Sector and Zone	35
Table 2 Workforce of Organizations	39
Table 3 Workforce of Institutions Studied	39
Table 4 Ages of Institutions Studied	40
Table 5 Cross tabulation of Availability of workplace HIV policy and Whether there is are M&E Plan/Frameworks	47
Table 6 Cross tabulation of Sector of Organization and Why there is No Policy	47
Table 7 Cross tabulation of Policy Availability and Whether HIV Test is Required for Recruitment	49
Table 8 Cross tabulation of Availability of Workplace HIV policy and Implementation of HIV Programs for staff	50
Table 9 Cross tabulation of Availability of Workplace HIV Policy and Whether any staff in the organization ever been laid off, faced HIV-related stigma and discrimination, or died due to AIDS-related causes.	53



LIST OF FIGURES

Figure 1 Map of Ghana showing HIV Prevalence as at 2022	2
Figure 2 An illustration of Functionalist and Sick Role Theories in Analyzing the Role of Workplace HIV Policy. Source: Researcher's own deduction	16
Figure 3 Factors Determining Availability of Workplace HIV Policy	25
Figure 4 Map of Greater Accra Region	29
Figure 5 Map showing Ashanti Region and its 43 MMDAs	30
Figure 6 Map of the Northern Region (Northern, North East and Savannah Regions)	31
Figure 7 Zones and Selected Regions for the study	33
Figure 8: Pie Chart Showing Availability of Workplace HIV Policy	41
Figure 9 Bar Graph Showing Institutions' Willingness to Accept Help to Get a Workplace HIV Policy	43
Figure 10 Bar Graph Showing Policy Dissemination Strategies by Institutions	45
Figure 11 Pie Chart Showing Implementation of HIV Programs for Staff	46



LIST OF ACRONYMS

AIDS	-	Acquired Immuno-Deficiency Syndrome
ARV	-	Anti Retroviral
CSO	-	Civil Society Organization
CVM	-	Condom Vending Machine
FBO	-	Faith Based Organization
FSW	-	Female Sex Worker
GAC	-	Ghana AIDS Commission
GHS	-	Ghana Health Service
GNFS	-	Ghana National Fire Service
GIS	-	Ghana Immigration Service
CEPS	-	Customs Excise and Preventive Service
HIV	-	Human Immunodeficiency Virus
ILO	-	International Labor Organization
M&E	-	Monitoring and Evaluation
MDA	-	Ministries, Departments and Agencies
MMDAs	-	Metropolitan, Municipal and District Assemblies
MSM	-	Men who have Sex with Men
NACP	-	National AIDS/STI Control Program
NSP	-	National Strategic Plan
NTC	-	National Tripartite Committee
OHLGS	-	Office of the Head of Local Government Service
PEP	-	Post Exposure Prophylaxis
PLHIV	-	Persons Living with HIV
PMTCT	-	Prevention of Mother to Child Transmission
PrEP	-	Pre Exposure Prophylaxis
S&D	-	Stigma and Discrimination
SSA	-	South Saharan Africa
UNAIDS	-	United Nations AIDS

CHAPTER ONE

INTRODUCTION

Background to the Study

Human Immunodeficiency Virus (HIV) was discovered as the cause of Acquired Immunodeficiency Syndrome (AIDS) in the early 1980s (Gallo and Montagnier, 2003), and since then it has spread to become a global epidemic. During the over four decades into its discovery, there has been an international attention to bring the epidemic under control. However, HIV and AIDS continue to have enormous adverse impact on affected societies (Burkholder, 2019).

According to the UNAIDS, over 85.6 million (64.8 million – 113.0 million) people have become infected with HIV globally since 1981. Of this number, 40.4 million (32.9 million – 51.3 million) have died from AIDS related causes, while 39.0 million (33.1 million – 45.7 million) were living with the virus by the year 2022. An estimated 1.3 million of these people were newly infected. AIDS related deaths were 630,000 (480,000 – 880,000) globally in 2022 alone (UNAIDS Fact Sheet, 2023).

The global HIV burden is disproportionately distributed, with Sub-Saharan Africa bearing around 67% of the total figure (UNAIDS, 2022; Moyo et al 2023). In Ghana, the first case was recorded in 1986 (Akwara et al. 2005), and as of 2022, there was an estimated 354,927 persons living with HIV in the country according to the Ghana AIDS Commission (GAC 2022 National and Sub-National Estimates and Projections). This figure corresponds to a national prevalence of 1.66%. Although this prevalence is lower compared to some other African countries, there is the need for interventions to reduce it further in order to achieve epidemic control as a country (Dwyer-Lindgren et al 2019). For Ghana, HIV is still a major public health concern as new infections and AIDS related deaths are still very high. In 2022, 16,574 new

infections were recorded, out of which 13,706 were adults 15 years old and above; while the remaining 2,868 were children 0 to 14 years. 9,359 people also died due to AIDS related opportunistic conditions, and this is alarming. Interestingly, only 64.14% of the 354,927 PLHIV are on ART, leaving a gap of over 35% PLHIV not on treatment. This is due to refusal of people to voluntarily test to know their HIV status; and once people do not know their status, or if they know but fail to disclose to their sexual partners, infection and reinfection tend to increase (Tessema, Bune and Mamo, 2023). HIV exist in all the regions of Ghana at varying prevalence, as shown in figure 1 below.

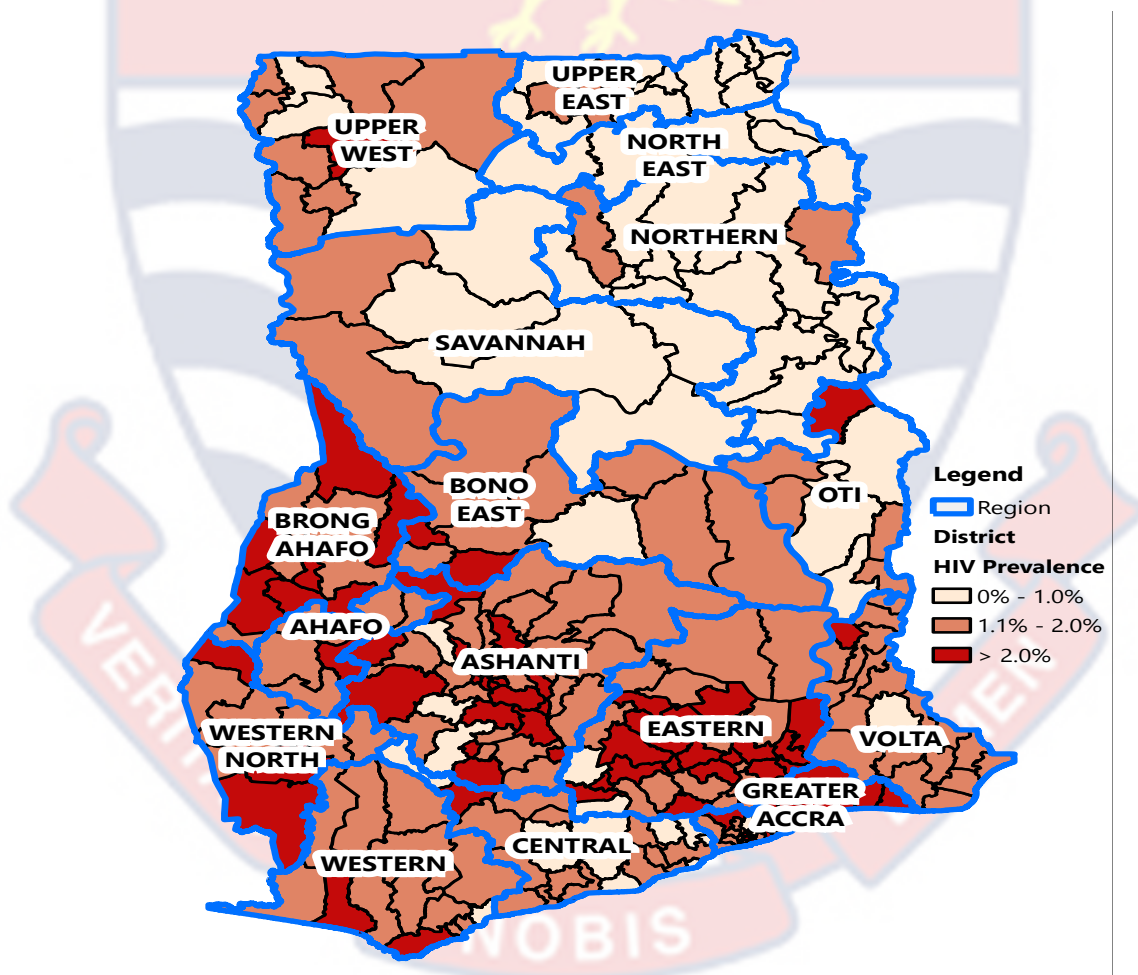


Figure 1 Map of Ghana showing HIV Prevalence as at 2022

Source: 2022 National and Sub-national HIV & AIDS Estimates and Projections

Ghana's HIV prevalence has seen a steady decline over the years, due to contributions of existing interventions. For instance, the overall adult HIV prevalence has dropped from 2.4% in 1998 to 1.66% in 2022. There are several interventions that have been rolled out as part of the national HIV response coordinated by the Ghana AIDS Commission (GAC). Among these include prevention of mother-to-child transmission (PMTCT) which seeks to prevent babies of HIV positive mothers from being born infected, Pre-Exposure Prophylaxis (PrEP), Post Exposure Prophylaxis (PEP), condom programmes among others; as well as interventions targeted at key populations such as Female Sex Workers (FSW) and Men who Have Sex with Men (MSM) and intravenous drug users (IUDs) [Ghana KP SOP, 2017; GAC, NSP 2021-2025].

As a way to reduce HIV related stigma, discrimination and its implications, Section 32(3) of the GAC Act 938, 2016 makes stigma and discrimination a criminal offence. The National HIV and AIDS Policy 2019 also requires that the workplace becomes a place conducive for working without prejudice, stigma and discrimination on the basis of a worker's real or perceived HIV status. The workplace is a very important place of social aggregation, as the majority of the adult working population find themselves in various formal and informal workplaces during working hours to interact with co-workers on various economic endeavors. Properly implemented HIV policy and programmes at the various workplaces will therefore prevent HIV related stigma and would make infected workers avail themselves for treatment and care services. Policy will also ensure a generation that is empowered to demonstrate accepting attitudes towards HIV positive workmates, and workers will remain healthy to contribute to the workforce.

According to the ILO, “workplace HIV policy provides the framework for action to reduce the spread of HIV and AIDS and manage its impact” (ILO Programme on HIV/AIDS and the world of work). It is a document that spells out modalities for providing preventive HIV education to workers and also assurance of care and protection for the infected. As the ILO requires countries to do, Ghana has shown commitment by creating a policy that organizations must adopt to implement in the various workplaces to avert the negative impact of HIV on the world of work.

This study assesses the availability of workplace HIV policy in the public sector as well, in the areas of formulation, implementation, monitoring and impact of workplace HIV policy and programmes. As already indicated, if workers through policy are able to access HIV services and remain knowledgeable and strong due to workplace HIV programmes, their families and the country at large will benefit.

Statement of the Problem

People Living with HIV (PLHIV) experience self-stigma as well as stigma and discrimination from employers and workmates due to their HIV positive status (Twinomugisha et al, 2020). For some newly diagnosed people, there is the experience of shock, disbelief, fear and anxiety, and sometimes suicidal ideation (Owusu, 2022). When such individuals find themselves in working environments that do not have accepting attitudes for PLHIV, the outcome can be dire. The reality is that, in some cases, staff have been retrenched when an employer found that a worker was HIV positive (Ajayi and Eyangndi, 2023).

HIV positive status also prevents PLHIV from accessing care, largely through status denial. This is more especially so in closed settings such as the workplace (Twinomugisha et al, 2020; Ismail et al, 2021). Much the same way, infected

individuals are not able to disclose to others that they have HIV, in order to receive the needed support from family, friends and even health facilities. This is evident in the fact that in Ghana, only 64.14% of the estimated 354,927 PLHIV were on treatment as at 2022 (2022 National Estimates and Projections).

Although many countries now have laws expressly proscribing the HIV status of a person as a basis for employment (eg. GAC Act 938, 2016), there have been instances where these laws have not been adhered to (UNAIDS Update 2016), and an evaluation of uptake and implementation of workplace HIV policy has also not been carried out in most SSA countries including Ghana, to know the extent to which organizations have actually adopted the national HIV policy for the benefit of employers and workers (Chatora et al, 2018).

As indicated earlier, Ghana has an estimated 354,927 persons living with HIV (PLHIV), and 330,215 of this figure are adults aged 15 years and above. Suppose that even half of this population (i.e. over 150,000 people) are workers in the various sectors, there is the need for workplace HIV policy, in order that these people will not have their rights infringed upon due to their HIV status.

Indeed, studies show that HIV policy is absent in many institutions in Ghana and other SSA countries as well (Chatora et al, 2018). In Ghana, as already mentioned, Dicardi Nelson and Nsiah-Peprah (2011) studied private companies in the Western Region and only 5 (3.23%) out of the 155 companies sampled had a workplace HIV policy. A similar study in Zambia among 128 institutions found that only 47 of them, representing 36.72% had a policy. And 34 of the 47 were private sector institutions. The study made the conclusion that workplace HIV policy existed at a very low

proportion (Chatora et al, 2018). Indeed, there are no current studies indicating otherwise.

There is a knowledge gap when it comes to the adoption, implementation and monitoring of HIV policy in the public sector, as most of the studies that had been done on HIV policy targeted the private sector. Studies that involved the public sector include Lartey (2013) who studied the implementation of HIV policy in one public hospital in the Greater Accra Region; as well as Asuquo et al (2016) who studied the involvement of nurses in the formulation of HIV policy in Nigeria's health care system.

This study has filled the knowledge gap by exploring the extent to which institutions have adopted the national workplace HIV policy in current times, most especially the public sector which have not been the focus of previous studies and has clearly outlined the key reasons why public institutions in Ghana do not have a policy.

Purpose of the Study

The purpose of the study is to assess the extent to which organizations had adopted workplace HIV policy and implementing HIV programmes for employees, particularly in the public sector.

Research Objectives

The main objective of the study was to access the extent to which workplace HIV policy were available in organizations in Ghana, the public sector to be precise. Specific objectives of the study included the following:

1. To identify the availability of HIV policies and their content at the selected public sector institutions in Ghana.
2. To investigate the effectiveness of the implementation of HIV policy and participation of employees in workplace HIV programs.

3. To assess the impact of the availability or non-availability of HIV policy on employee welfare and on the organization itself.

Research Questions

The study sought to answer the following questions:

1. To what extent is HIV policy available in public sector institutions in Ghana?
2. To what extent do the contents of available policies conform to the national policy?
3. How effectively are HIV programmes implemented at workplaces that have a policy?
4. How has the availability of HIV policy impacted on staff welfare?
5. How effectively are HIV policy and programmes monitored and evaluated?

Research Hypothesis

Hypothesis may be defined as a “proposition or a set of propositions set forth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts (Kothari, 2004, p. 184). This study primarily investigated the availability of workplace HIV policy in Ghana. Earlier studies provided some of the factors that could predict the availability or otherwise of HIV policy in an organization as well as the implementation of the policy in organizations that have them in place. Based on available literature, the researcher formulated the following two hypotheses:

Hypothesis 1

H₀: There is no relationship between size of institution and availability of workplace HIV policy

H₁: There is a relationship between size of institution and availability of workplace HIV policy

Hypothesis 2

H₀: There is no relationship between availability of workplace HIV policy and implementation of HIV programmes

H₁: There is a relationship between availability of workplace HIV policy and implementation of HIV programmes

Significance of the Study

The significance of the study stemmed from the fact that the extent to which organizations had workplace HIV policy in Ghana was not fully known; and the fact that available studies on the subject in Ghana did not indicate the reasons why organizations were not taking up the adoption and implementation of workplace HIV policy seriously, as required by the 2012 National Workplace HIV Policy and the 2019 Nation HIV and AIDS Policy. This study has therefore provided a current information on the availability of HIV policy in Ghana's public sector, as well as the factors contributing to the non-availability of the policy in organizations that do not have them. The study has made a significant contribution to literature, and also made important recommendations that will help promote the need for adoption and implementation of workplace HIV policy. Again, the study forms a basis for further research on the topic and other HIV topics that concern policy. Finally, the study will contribute to national development if the recommendations are implemented. The wellbeing of workers and their families will be safeguarded.

Delimitation

The study focused mainly on the availability of workplace HIV policy in the organizations included in the study, as well as the content of such policy, the participation of staff in HIV programmes at the workplace and how the policy and its implementation is monitored and evaluated by the organizations that have them. The study was carried out in the Greater Accra, Ashanti and the Northern Regions of Ghana among selected public sector institutions, i.e. SHS of GES, MMDAs and the security agencies.

Limitations

The study included participants selected from a number of public sector institutions. The findings therefore do not represent the reality in all organizations in Ghana as far as the research topic is concerned. This means that generalizing the findings is problematic. Also, time and other constraints did not allow the researcher to personally administer questionnaire and interviews face-to-face in the organizations included in the study. This means that certain salient information that could be of relevance to the study may have been lost.

Definition of Terms

The terms and concepts used in the research that require definition are Policy, Stigma and Discrimination which are explained as follows:

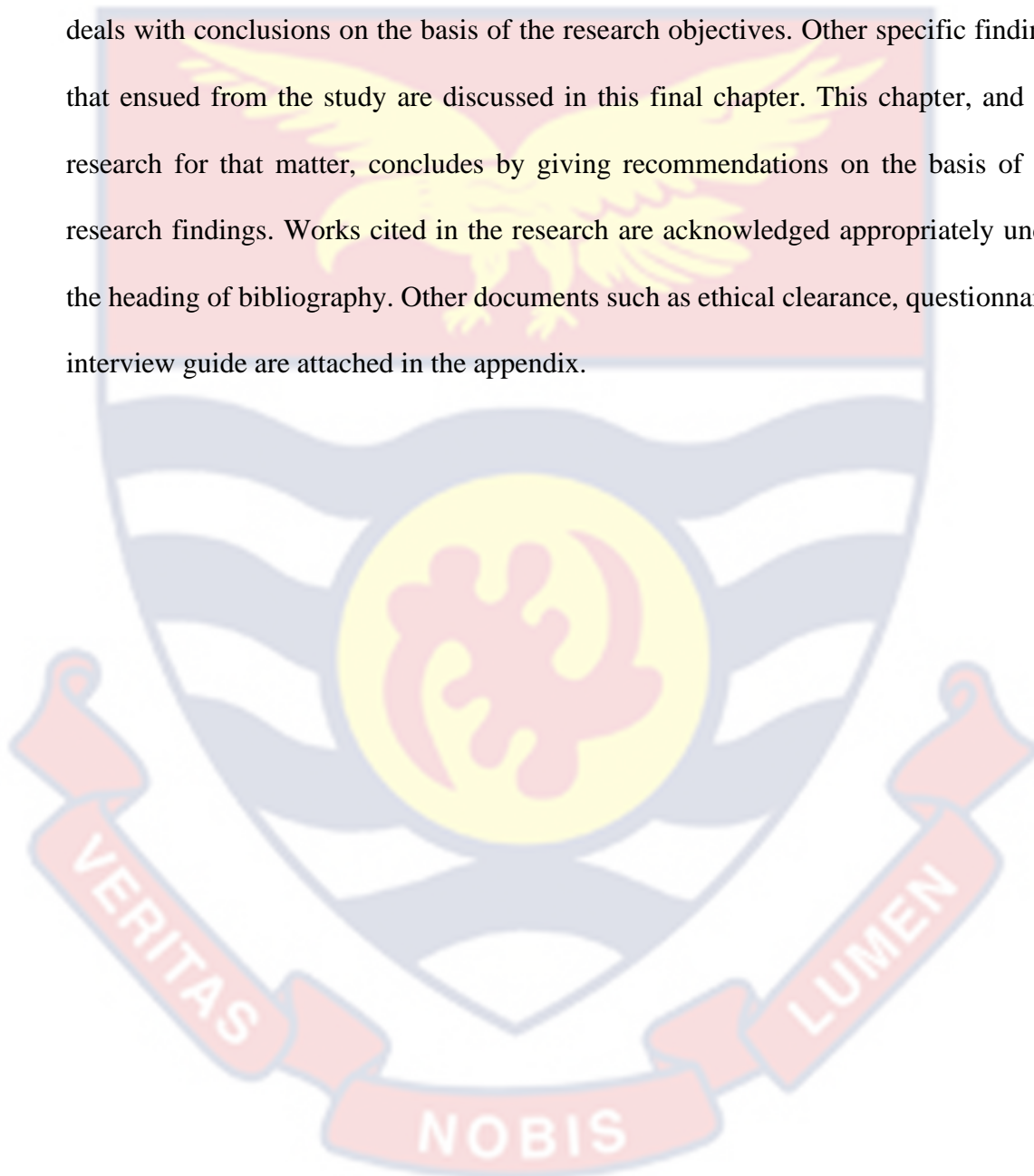
- **Policy:** This refers to a document developed by an organization spelling out the principles and regulations regarding a particular subject and how it applies to the organization's stakeholders.
- **HIV-related Stigma** refers to a negative and or unfair belief that is attributed to people infected and or affected by HIV and AIDS.

- **Discrimination** involves treating people differently due to their perceived characteristics.
- **Size of institution:** In this study, the number of employees determine whether an institution is small or large. The researcher adopted the institutional size categorization similar to what is found in Chatora et al (2018). However, in this study, less than 50 employees' defined small institutions, whiles between 50 and 99 employees' constituted medium sized workplaces. Large workplaces had between 100 and 500 employees and the very large work places had more than 500 employees.
- **Age of institution:** This refers to how long an institution had been in existence. In this study, less than 10 years old institutions were considered to be new, whiles institutions between 10 and 50 years were considered old. Very old institutions were those that were over 50 years old.

Organization of the Study

The study is presented in five chapters. Chapter one presents the background to the study. This is a general introduction to the HIV situation globally, regionally and for Ghana; and the state of workplace HIV policy in Ghana, which prompted the need for the study. The purpose of the research as well as significance of the study is presented in this chapter. Chapter two is the review of literature. A conceptual framework is drawn from the works of other scholars and researchers to support the research. Theories for explaining policy formulation and implementation come to the fore in the literature review. This informs the research when it comes to hypothesis formulation and the use of theory. Chapter three addresses the methodology for data collection and handling. The chapter deals with research design(s) regarding the choice of research setting, method of sampling and sampling size. Fieldwork, data

management and field experiences are also discussed in this chapter. Chapter four deals with data analyses and interpretations. Description and explanations are given to the findings from the fieldwork after responses have been analyzed. Tables and figures are used in this chapter to support the interpretations given to findings. The final chapter deals with conclusions on the basis of the research objectives. Other specific findings that ensued from the study are discussed in this final chapter. This chapter, and the research for that matter, concludes by giving recommendations on the basis of the research findings. Works cited in the research are acknowledged appropriately under the heading of bibliography. Other documents such as ethical clearance, questionnaire, interview guide are attached in the appendix.



CHAPTER TWO

LITERATURE REVIEW

Introduction

A review of the works of other researchers on a similar topic to appreciate their findings, gaps and recommendations, as well as review of theories and conceptual framework are presented in this chapter. Maxwell (2005) explains that theory is a set of concepts and proposed relationships among them. He adds that it is a structure that is intended to explain or predict something about the world.

Theories provide explanation, understanding and meaningfulness to specific phenomenon in research. Research without theory is less emphatic to establish the relationship among attributes and variables. Two theories that support policy, and more especially health related policy are the Functionalist Theory and the Sick Role Theory.

Functionalist Theory

This is one of the classical theories used in policy studies. This theory has its roots in the works of Sociologists such as Auguste Comte (1798-1857), Herbert Spencer (1820-1903), and Emile Durkheim (1852-1917). This theory suggests that social structures such as institutions, hierarchies, and norms perform functions to maintain a system (Gomez-Diago, 2019). In this vein, social policy, which sociologically is an institution is a way to keep society functioning harmoniously, as it addresses problems within society and helps to maintain social solidarity or cohesion. The theory sees society as a system of inter-related parts, and seeks to identify the functions that these parts carry out (Craib, 1997). The same theory suggests that a dysfunction in any institution will affect the entire social structure, much as when one organ becomes diseased, the entire organism gets affected (Nickerson, 2023). According to functionalists, the state acts in the best interests of society and uses social policies for

the overall good of everyone. Of course, in analyzing the essence of HIV workplace policy, it is seen as serving the function of ensuring that HIV knowledge on modes of transmission, methods of prevention and clinical management for the infected is made available to all workers with a consequential benefit for their families and society as a whole.

Associated HIV programmes at the workplace such as voluntary HIV Testing Services (HTS), counseling services, condom promotion etc. are intended to keep HIV infected and affected staff as part of the working community without re-infecting others, without being stigmatized and discriminated and to feel free and strong to work. The reverse is true when the policy is absent, or is not playing its role effectively and efficiently. When institutions fail to adopt and implement the HIV policy, workers will lack the requisite knowledge on modes of transmission and prevention. Staff may engage in risky sex behaviors and get infected. The infected may be laid off because there is no policy binding management to retain HIV positive employees. There will also be stigma and discrimination on the basis of the workers' perceived or real HIV status at the workplace. All these will breed an atmosphere of insecurity. Productivity will be affected negatively as well. The functionalist perspective or theory can fittingly be applied to analyzing the importance of HIV policy at the workplace.

Criticism to this theory mainly come from Marxists who from the perspective of Karl Marx's Conflict Theory contend that society is in constant conflict for power and wealth. In this purview, policies are formulated by the 'ruling class to exercise control over those being ruled.' In the area of HIV policy, the exercise of control will be to prevent the unaffected from getting infected, so that the ruling class, the leaders of the institutions will continue to be in control. This argument however, is not in itself thwarting the functional role played by a policy, if adopted and implemented.

Sick Role Theory

Another functionalist aligned theory that is applicable to the implementation of the HIV workplace policy is Talcott Parson's Sick Role Theory propounded in 1951. The theory concerns the social aspects of becoming ill and the privileges and obligations that come along with it.

Parsons argued that there are four elements of the Sick Role Theory. These include the fact that;

1. The sick person is exempted from normal social roles
2. The sick person is absolved of personal responsibility; he or she is not blamed for their condition
3. The sick person should try to get well
4. The sick person should seek technically competent help and co-operate with a physician

The theory looks at the social context of health and illness. As a matter of fact, society recognizes that it is not convenient to be sick and therefore sympathize with the sick. Sick people are spared from performing the duties they handled while strong. The sick individual also knows that it is uncomfortable to be sick. He or she is therefore willing to cooperate with any assistance given to recover.

The significance of Parson's Sick Role Theory in the implementation of HIV workplace policy stems from the fact that usually, when a worker is diagnosed with HIV, the employer will allow him or her to seek the needed healthcare while excused from normal duty for as long as reasonably possible. Salary and other benefits do not cease during this period. It is noteworthy that even if the employer acts contrary to the 'Sick Role', other staff may agitate and call the employer to order to treat their colleague

‘fairly.’ As the second element states, the sick person is absolved from personal responsibility of the cause of the sickness. Interestingly, even if it is generally known that the employee got infected as a result of his or her own risky sexual behavior, no reference will typically be made of that during the time that he or she is receiving treatment. The third and fourth elements identified from the theory are also real. Indeed, the sick individual *does not like the sick role*. This is because, regardless of all the so called privileges that society, or in this case the institution through the HIV policy allows sick people to enjoy, they do not wish to continue living in the sick state. The sick person does not see this allowance as something pleasant. Rather, he or she would want to get well and continue with normal routines.

The fourth element particularly points to the fact that competent help would be given in order for the sick person to return to normalcy. Although there is currently no outright cure for HIV, the anti-retroviral (ARV) medications available are effective in preventing the viral load from escalating. In fact, ARVs are able to suppress the virus to the point of becoming undetectable when tested; and it will be ensured that the infected employee is given this available treatment, to help him or her recover.

Thus far, Parsons’ theory of the Sick Role is realistic. Although critics have contested that the Sick Role theory is not applicable to all illness situations and therefore generalizing the theory is problematic, its real life application in most illness situations cannot be denied.

Ideally, policies are supposed to be implemented after they are formulated and disseminated; then evaluated for effectiveness and relevance and after some time, modified.

Functionalism and the Sick Role Theory, both point to the fact that in order for social order to be maintained, there is the need for an institution to function correctly.

Figure 2 shows the relationship between the two policies and how the existence and functioning of HIV policy at the workplace leads to social order.

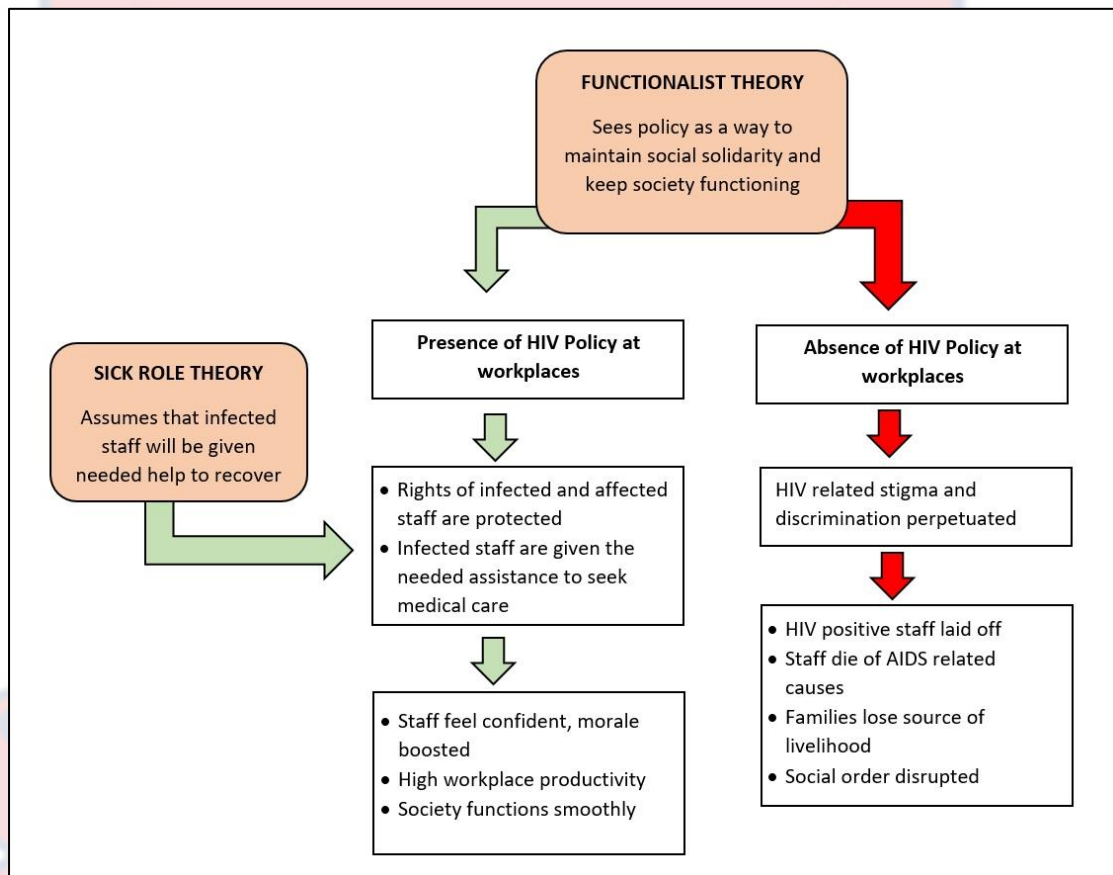


Figure 2 An illustration of Functionalist and Sick Role Theories in Analyzing the Role of Workplace HIV Policy. Source: Researcher's own deduction

Review of Concepts

The concepts used in this study include 'workplace HIV policy.' This is a document outlining the principles that an organization adopts to deal with HIV in the organization, in line with the national guideline. As a unit of analysis, workplace HIV policy is a major variable that this study hinges on. Other concepts include 'availability of workplace HIV policy, where 'available' means the existence of the policy as a

document that an organization has consciously adopted to address HIV at the workplace. 'Workplace' is any physical or virtual arrangement for people to exert physical or mental efforts towards achieving a common economic or corporate goal. 'Impacts' are the effects or changes that the availability or otherwise of a policy has had on employees and on the organization itself.

Conceptual Review

This section focuses on the works of other researchers on workplace HIV policy; the ramifications of existence and non-existence of the policy; formulation and dissemination of workplace HIV policy to key stakeholders including workers; adherence and impact of policy among others.

Background to Social Policy

Human behavior needs regulation to avoid doubt as to what is socially acceptable and what is not (Vargas-Hernandez et al, 2011). In modern society, one key tool for regulating social behavior is policy; and policy has been defined as a course or principle of action adopted or proposed by an organization or individual (Oxford Languages Dictionary). Anderson (1997) explains policy as a relatively stable, purposive course of action followed by an actor or set of actors in dealing with a problem or a matter of concern. Policies provide guidance, consistency, accountability, efficiency and clarity on how an organization operates. When everyone is clear about what needs to be done, how it needs to be done and who is responsible to do it, it leads to smooth operations. The reverse is true in instances where there are no policies. In fact, people are left to chance when there are no policies to regulate behavior. Due to the overarching benefits of policy, organizations have policies regarding the things that matter to them, such as staff training, career progression, succession, among others. One important area that requires policy in any organization is the health of staff.

Availability of Workplace HIV Policy in Ghana

The 2004 policy did not place emphasis on ensuring that institutions followed through to develop HIV policies and implement for their staff. That notwithstanding, a number of development partners and CSOs including GIZ, ILO, Ghana Employers Association (GEA), Ghana Business Coalition for Employees Wellbeing (GBCEW) and others assisted institutions to develop and implement HIV policies and programmes along the guidelines in national policy. By 2012, it had been documented that three hundred and twenty-eight (328) institutions across all sectors had developed HIV workplace policies and were implementing them. These were made up of 146 institutions in the hospitality industry, 89 informal sector organizations and trade associations, 51 member institutions of the Ghana Employers Association and 42 private sector institutions (GAC Progress Report, 2014). Although these were noteworthy achievements, studies conducted at the time suggested that the number of institutions that developed policies and implemented them in line with the 2004 workplace policy were very minimal. For example, Dicardi-Nelson and Nsiah-Peprah (2011) on availability of workplace HIV policy in Ghana, found that only 5 out of the 55 companies sampled from the then Western Region had HIV policy. Interestingly, all the companies that had a policy in that study belonged to the mining industry (which were all in the private sector).

Chatora et al (2018) made a similar finding in the study of HIV/AIDS workplace policy as a tool for addressing epidemic drivers at the workplace. This study which was conducted in Zambia among 128 institutions found that only 47 representing 36.72% of the institutions had a policy. And 34 of the 47 (representing 72.34% of those with policy) were private sector institutions. It was concluded that HIV policy existed at a very low proportion. Kapangama (2021) made a similar assertion concerning the

availability of workplace HIV policy in Malawi. She noted that Malawi has a low adoption of workplace HIV policy, citing a study in Malawi which revealed that 38% of private sector companies sampled had a policy in place, as against the remaining 62% that did not have it (Bakuwa, 2010). She also identified implementation gaps, attributing it to lack of interest and lack of knowledge on the existence of workplace HIV programs. She further saw that public sector organizations developed the policy but fail to implement it.

Concerning the underlying factors affecting the availability or otherwise of HIV policy at the workplace, Chatora et al (2018) provides meaningful insights. According to their study, the size of an organization, in terms of the number of employees affects policy availability. In small workplaces, employees knew each other and could freely discuss various issues including HIV. It was therefore not seen to be necessary to have a formal policy on HIV. On the other hand, large workplaces with high employee numbers, according to the study had an increased burden of HIV which necessitated the organization's response to HIV through policy and programs.

Sensitization was also seen to affect HIV policy adoption and implementation. Chatora et al (2018) found that some organizations did not have a policy because they did not know how to develop one. This is supported by Kapangama (2021). Availability of health or medical schemes was also found to be a factor. The study found that although some organizations did not have an HIV policy in explicit terms, they had a medical scheme in place which catered for employees' general illnesses, HIV related illnesses and other chronic health conditions.

As mentioned earlier, the 2004 policy did not have any special implementation and monitoring plan to ensure uptake by the various organizations in the country. Yet,

in 2012, a new policy was developed by the NTC and GAC. This policy added “implementation” to its goal thus: “to provide a broad national guideline to direct the formulation and implementation of workplace HIV policy” (pp. 14 of 2012 policy). This policy placed more emphasis on ensuring that employers adopted and implemented it. Indeed, the then President is noted as stating that his expectation for all employers was to actively implement the policy (pp. 15).

Workplace HIV Policy in Ghana’s HIV Response

The workplace has always been regarded as a place where HIV programmes must be implemented; and HIV policy as a useful tool in HIV prevention (Mbulaje, 2020). Where a policy is in place, implementation of HIV programmes at the workplace help to equip staff with the requisite knowledge to understand the science of HIV and to avoid HIV-related stigma and discrimination. Workers who are HIV positive are also empowered to become self-confident and to avoid self-stigma. The United States Centers for Disease Control (CDC) adds that workplace HIV policies and programs reduce fear, work disruption and customer concern, and also demonstrates a company’s corporate social responsibility, leadership and commitment to their employees and communities. All of these mean that the absence of policy in an organization may breed a culture of HIV related stigma and its related consequences at the workplace. When this happens, the effects include loss of livelihood, decreased productivity, economic hardship as well as deterioration of psychological and physical wellbeing of individuals and families (Ke et al, 2022).

As earlier indicated, policies may exist on various subjects in an organization to regulate behavior (Firliandini and Ahman 2022). Health policy in general may therefore exist in organizations, spelling out what health facilities are designated for staff and their dependents to seek medical care, what percentage or proportion of staff

health expenditure will be covered by the employer etc. (Asumeng et al 2015). Certainly, these may include HIV. However, such generic policies may not be consciously aligned with the national workplace HIV policy. It is for this reason that there is specifically formulated national workplace HIV policy, with the objective of being adopted and implemented by all workplaces.

However, Ghana's HIV response have largely been donor funded over the years, and funds from donor sources have basically not targeted the implementation of workplace HIV policy. Development partners such as the Global Fund for HIV, TB and Malaria, the United States Agency for International Development (USAID), Danish International Development Agency (DANIDA) and others have all supported and continue to support some aspects of Ghana's HIV response (2023 NASA Report).

It is noteworthy that strategies and interventions for the HIV response is principally driven by data and to ensure the most efficient and effective use of resources, interventions are directed at where the need is greatest. For Ghana, from 2015 onward, except for ARVs and other consumables, donor funding towards HIV education and sensitization have mainly been focused on key population (KP) related interventions rather than the general population made up of schools, communities and the workplace. In fact, Ghana's external funding towards HIV has greatly reduced in the last decade (Halasa-Rappel et al, 2021) This is partly due to the available data, which suggests that HIV prevalence is much higher among key populations including Female Sex Workers (FSW) and Men who Have Sex with Men, than the rest of the population (2022 HIV Estimates and Projections; 2020 BBSS Report; 2017 Ghana Men Study II; The Global Fund, Key Populations Action Plan 2014-2017).

The factor of funding, coupled with weak compliance monitoring of institutions to ensure that the workplace policy is adopted has made Ghana lose out on the potential gain in HIV prevention using the workplace. In summary, just like the 2004 policy, the 2012 one too has not seen any significant level of implementation. It is only that no comprehensive survey has been carried out to report conclusively on the level of adoption and implementation of the policy.

Formulation of Workplace HIV Policy

Institutions adopt different approaches to policy formulation. For instance, some choose top-down approach, where management formulates the policy and disseminates it down to the various staff levels. This approach obviously requires a lot of effort to implement, since the employees were not part of the formulation process. Chatora et al (2018) noted that an inclusive process of policy formulation, development, and dissemination allows for wide consultation and negotiation on policy content as well as what is feasible for the employer. Leadership for policy gives it governance, representation, responsibility, and accountability as well as advocacy for its implementation. It ensures championing and planning for resources in the overall organizational plans. This does not always happen, as a survey in workplaces with a policy across Southern Africa found that only 15% of union leaders had been involved in discussions during development, describing it as a 'copy and paste' policy, where another company's policy was used to satisfy the requirement of having a document. At times too, some staff for various factors do not get involved in ideas sharing activities such as making inputs for policy formulation (Manhajan et al, 2007).

Asuquo et al (2016) find two reasons for the low level of involvement in policy formulation. These are individual barriers and systemic barriers. Individual barriers include where staff do not get involved due to a lack of appreciation for one's

contribution to the overall quality of the policy document. Others, especially of the junior ranks may feel that they do not have much to contribute due to their level of education or position in the institution. Systematic barrier on the other hand is where the institution itself systematically refuse to include certain categories of employees in decision making. In Asuquo et al (2016), systemic barrier was seen where in a health institution, nurses were marginalized in decision making, and this happened when a non-nurse leader was in charge of a particular policy formulation process. Of course, this can occur in other industries as well, and it deprives a policy of meeting the real needs of the rank and file whose actions and interests it seeks to regulate.

Dicardi-Nelson and Nsiah-Pepurah (2011) also found that the companies that had a policy had huge financial outlays as a result of being mining companies, suggesting that funding is a factor for the formulation and implementation processes of HIV policy. To confirm this, it was seen that although 85% of the companies studied showed readiness to adopt the policy, they had not done so yet as at the time of the study; and about 10% were bold to indicate that financing the HIV policy was a challenge and that they expected the government to take that up.

Dissemination and Use of Workplace HIV Policy

Policy dissemination involves distributing or communicating the content and essence of a policy to the stakeholders of such policy. Policies are not meaningful in themselves if after formulation, are not disseminated and used for their intended purposes. As noted by Purtle et al (2016), health policy has a tremendous potential to improve the health of a given population. He adds however that this is possible only through policy dissemination and implementation. The ILO suggests that both management and staff representatives need to be on board for implementing HIV policy at the workplace (ILO Factsheet 6). This is particularly necessary since the involvement

of management or their ‘agents’ will boost workers’ morale to participate in the programmes (Bullock and Lavis 2019). When policy is disseminated, staff are afforded the opportunity to know exactly what the policy is about, and then utilize the benefits of it. This is true of staff of all levels within the organization. In this vein, Dicardi-Nelson and Nsiah-Peprah (2011) noted in their study that the companies that had HIV policies, had their managers and employees being more knowledgeable about HIV, AIDS and ARVs than companies without a policy, implying that companies having the policy ensured that both management and workers became abreast with the content of the policy.

Studies that have been conducted in Ghana on HIV policy have not elucidated on how the organizations that have a policy disseminated them. However, the ILO has provided guidelines on how to formulate and implement a policy (ILO, 2013). The national policy is aligned with this ILO document; and individual institutions are expected to follow suit.

Conceptual Framework

Available research on the implementation of Ghana’s workplace HIV policy is scanty. The few research works available indicate that only a few organizations adopted the HIV policy and implemented them. The theories examined indicate that policy, when considered through the lens of functionalism, should be seen as a tool performing a unique function to ensure maintenance of a certain social order, and the Sick Role Theory on the other hand explains that the social system sympathizes with any employee who becomes HIV positive, thereby allowing them to undergo treatment without laying them off. The studies reviewed show that certain factors affect the adoption (availability) and implementation of the policy. The principal ones can be summarized as depicted in the Figure 3:

Workplace HIV Policy Availability	Size of Organization	Big	Policy
		Small	No Policy
Financial Outlay	Huge	Policy	
	Small	No Policy	
Sensitization on Policy	Sensitized	Policy	
	Not Sensitized	No Policy	

Figure 3 Factors Determining Availability of Workplace HIV Policy

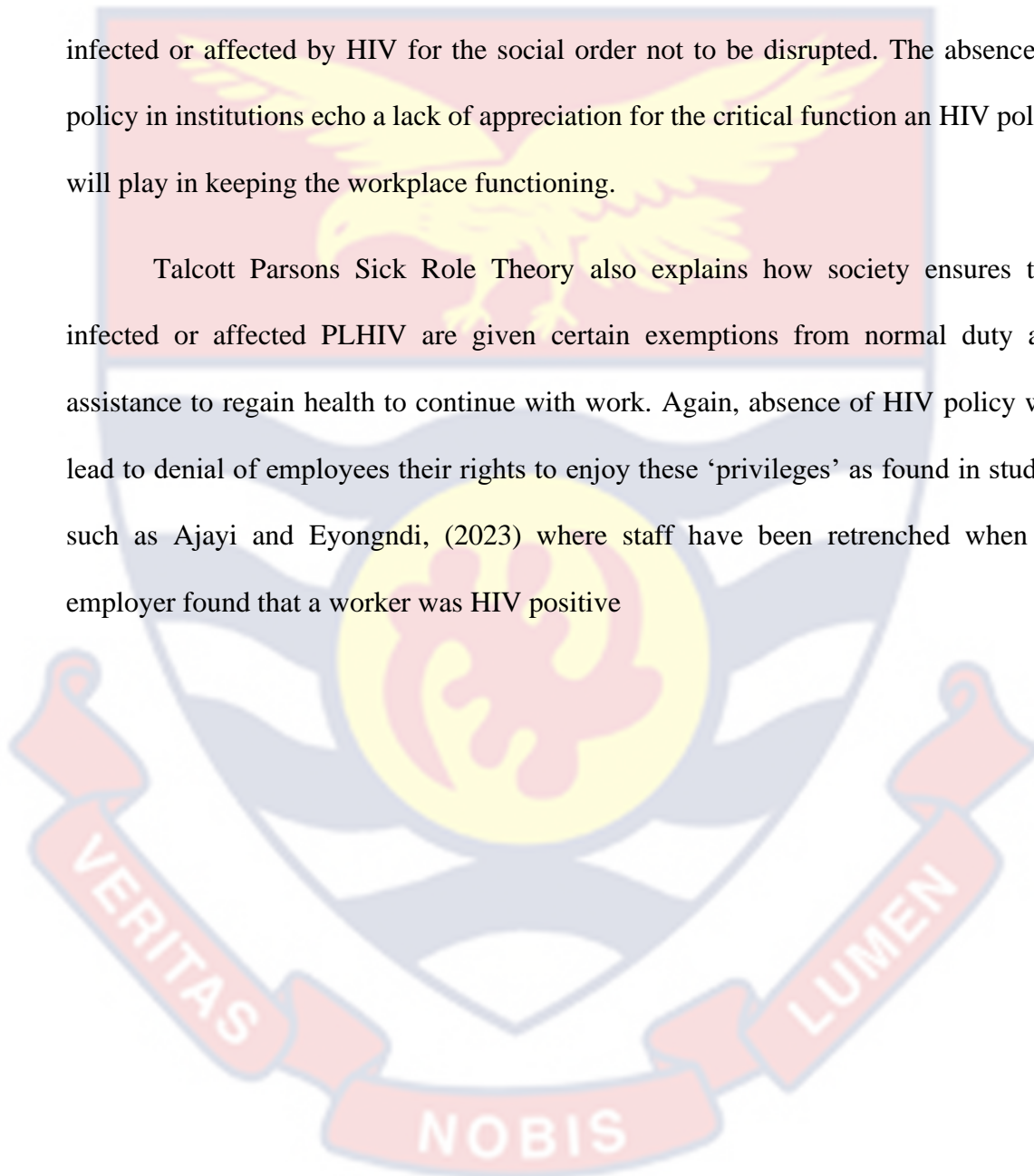
Chapter Summary

Available research on the implementation of Ghana's workplace HIV policy is scanty. The few research works available indicate that only a few organizations adopted the HIV policy and implemented them around 2010 through 2015. Studies show that establishments that have the policy in place are likely to implement HIV programmes for workers Dicardi-Nelson and Nsiah-Peprah (2011). Some studies have also identified that availability or otherwise of HIV policy depends on factors such as the size of the organization in terms of employee numbers, sensitization about HIV policy and the financial outlay of organizations. Since the 2005 policy was reviewed and replaced with the 2012 one, no national level review has been conducted. Studies outside Ghana indicate varied approaches to policy formulation. Asuquo et al (2016) identified

personal and systemic barriers to policy formulation which resulted in policies that were not consultative enough and therefore difficult to implement.

In the area of theory, workplace HIV policy fits into Functionalism, as it serves the function of regulating behavior of employers and employees regarding persons infected or affected by HIV for the social order not to be disrupted. The absence of policy in institutions echo a lack of appreciation for the critical function an HIV policy will play in keeping the workplace functioning.

Talcott Parsons Sick Role Theory also explains how society ensures that infected or affected PLHIV are given certain exemptions from normal duty and assistance to regain health to continue with work. Again, absence of HIV policy will lead to denial of employees their rights to enjoy these 'privileges' as found in studies such as Ajayi and Eyoungndi, (2023) where staff have been retrenched when an employer found that a worker was HIV positive



CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter deals with research design, study area, population, sampling method, data collection procedures, measurements of variables and data processing techniques used in this research. In short, the chapter explains how the researcher went about the study.

Research Design

Bets (2023) describes research design as that structure that combines different components of a research. It involves the use of different data collection and data analysis techniques in a logical way to answer the research questions. It also describes the overall strategy that was employed in carrying out the research. According to Saunders et al (2012), there are three basic research designs, which include descriptive, exploratory and explanatory designs.

Explanatory research design was used in this study to examine the availability of workplace HIV policy and the reasons for non-existence in most institutions as revealed by existing literature. This design was used because the topic has already been explored by other researchers and this study only sought to further examine and explain the causal analysis. A mixed approach (method) was used in the study where both quantitative and qualitative data was collected and analyzed to complement each other in the findings.

Study Area

Geographically, the research was carried out in Ghana. Specifically, participants were selected from the Greater Accra, Ashanti and the Northern Regions (*For the sake*

of convenience, the three northern regions, i.e. Savannah, Northern and North East Regions were combined and labeled as 'Northern Region' in this research). These regions are described as follows:

Greater Accra Region

Greater Accra is the national capital region with twenty-nine MMDAs. According to the 2021 Population and Housing Census (PHC), the population of Greater Accra Region was estimated to be 5,455,692 (16.69%), comprising 2,679,063 males (49.1%) and 2,776,629 females (50.9%). Greater Accra has the highest population growth rate of 2.9% (GSS: 2021 PHC) which is partly due to Accra being at the receiving end of a steady migration of people from other parts of the country and neighboring African countries. Greater Accra is the most vibrant economic region with industries, multinational companies, private organizations, as well as all the public ministries, departments and agencies. The seat of government is also in this region, and it is the region with the highest number of PLHIV. Figure 4 below is a map of Greater Accra showing its MMDAs.

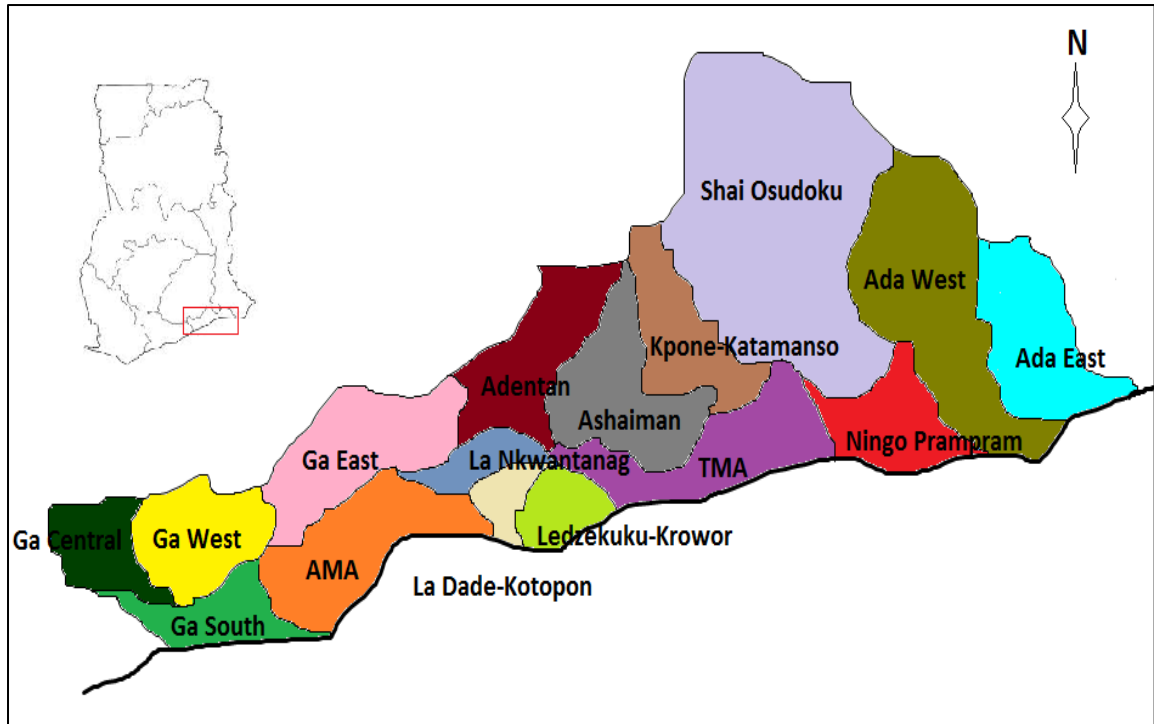


Figure 4 Map of Greater Accra Region

Ashanti Region

Ashanti Region is located in Ghana's middle zone, covering a total land area of 24,389 km² (Wikipedia). It is situated between longitudes 0.15 W and 2.25 W and latitudes 5.50 N and 7.46 N. It is bordered by five administrative regions: Eastern Region located to the east, the Western North Region facing the south-west, the Central Region (to the south), the Bono East Region (to the north), Ahafo Region (to the east), and Bono Region located at the North-West. Ashanti region has 43 MMDAs, with 24 district assemblies, 18 municipal assemblies, and one metropolitan assembly, namely the Kumasi Metropolitan Assembly. Kumasi is the regional capital (Ashanti RCC Website).

Ashanti Region has the second largest population after Greater Accra Region. The population was 5,440,463 people in the year 2021, according to the Ghana Statistical Service with females making up 50.7% of the population (2,760,549) and

males being 49.3% (2,679,914). It is a very lively region with bustling socioeconomic activities, next only to Greater Accra, and almost all the public sector organizations have regional offices here and same with the major private companies. It also serves as a transit region for travelers to the north from the south of the country, and east to west. Ashanti region, like the Greater Accra region, has a youthful population and many working-class residents. Ashanti Region has the second highest number of PLHIV (2022 Estimates and Projections) in Ghana, making it worthwhile to investigate into workplace HIV policy in organizations located in this region. Figure 5 is the map of Ashanti Region.



Figure 5 Map showing Ashanti Region and its 43 MMDAs

Source: Wikipedia

Northern Regions (Savannah, Northern and North East Regions)

This is the largest region in Ghana with a population of 1,820,806 and a land mass of 70,384 sq.km, representing 29.5% of the total land mass of Ghana. Administratively, the three regions combined has 29 Metropolitan, Municipal and District Assemblies.

The three regions consistently continue to record the lowest HIV prevalence in the country. However, there are minimal variation among the three regions. Apart from North East which recorded a decrease in prevalence from 0.53% in 2021 to 0.45% in 2022, the Northern region increased in prevalence from 0.49% in 2021 to 0.53% in 2022 likewise Savannah region from 0.79% to 0.90% in 2021 to 2022 respectively.



Figure 6 Map of the Northern Region (Northern, North East and Savannah Regions)

Population

The study population included selected public sector organizations (MMDAs, second cycle institutions (SHS) and the major public sector security agencies, i.e. the

Police, Prisons, Armed Forces, GNFS, Immigration and Customs) in Ghana. The researcher focused on public sector organizations because most of the studies that have been conducted on workplace HIV policy targeted the private sector. Inclusion of the selected public sector organizations was on the basis of the fact that they had high number of workers and hence would need to have HIV policy in place (Compare Chatora et al 2018). Additionally, the security agencies (men in uniform) apart from having high staff numbers and are also considered to be a vulnerable group in the HIV response (WAAF Annual Report, 2019). MMDAs have high staff numbers and same with the second cycle institutions of the Ghana Education Service.

Sampling Procedure

According to Glicken (2003) cited in Adwok (2015), sampling is the process of selecting a smaller group of participants to tell us essentially what a larger population might tell us if we asked every member of the larger population the same questions. Sampling is the statistical process of selecting a subset of a population of interest for purposes of making observations and statistical inferences about that population. There are two main sampling techniques, namely probability sampling and non-probability sampling (Kothari, 2004). Simple Random Sampling, Stratified Random Sampling, Systematic Random Sampling, Cluster Sampling and Multistage Sampling, all fall under probability sampling. Non-probability Sampling on the other hand include Quota Sampling, Snowball Sampling, Purposive Sampling and Convenience Sampling.

In this study, purposive sampling technique was used. According to Obilor, (2023), Purposive Sampling is a non-probability sampling technique where the researcher selects only those subjects that satisfy the objectives of the study based on the researcher's conviction. It is a sampling technique in which the researcher depends on his discretion to select participants from the study population. The sampling process

depends on the researcher’s judgment and knowledge of the context. It is often used in qualitative research, though both qualitative and quantitative sampling methods may be used when samples are chosen purposively (Tongco, 2007).

To apply this technique, the researcher divided the country into three zones; namely southern, middle and northern zones. Greater Accra, Ashanti and Northern regions were selected to represent each of the zones respectively and the zones together represent the country. Selected individuals in MMDAs, SHS and security services are the study subjects. All MMDAs, SHS and regional commands of the Security agencies in the regions representing the zones were all included in the study as the sample for the entire country. This is illustrated in figure 7 below.

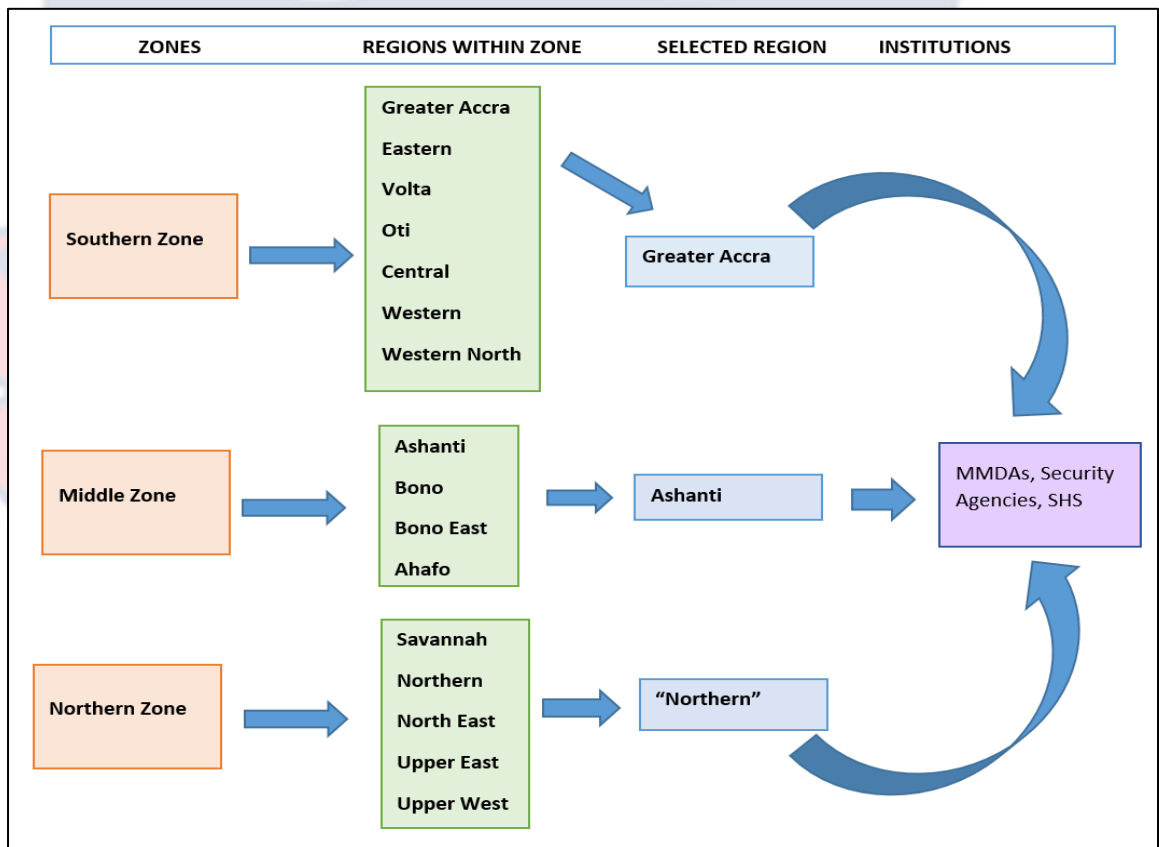


Figure 7 Zones and Selected Regions for the study

Sampling Frame

The sampling frame was made up of all MMDAs, Senior High Schools and the major public sector security agencies in Ghana, namely the Military, the Police, Immigration, Customs, Prisons and Fire Service. There are currently 261 MMDAs in Ghana according to the institute of Local Government Studies and 721 SHS/TVET in Ghana (GES 2020). There are over 30,000 police officers across the service's 654 stations (Wikipedia); the Ghana Armed Forces had 15,000 personnel as at 2018 (Ghana Armed Forces MOWIP Report, 2020, p. 11). The identified study subjects were selected from three zones in order to make the final sample representative of the institutions they were drawn from. The assumption was that based on the objectives of the study specific participants may hold varied and relevant views and ideas and therefore need to be included in the sample (Mason, 2002; Robinson, 2014; Trost, 1986).

Sample Size

A sample is the specific group that a researcher collects data from (Obilor, 2023). A sample is simply a subset of the population. The sample must be representative of the population from which it was drawn and it must have good size to warrant statistical analysis.

This study was intended to include 355 participants which included the 29 MMDAs from the Greater Accra Region representing the southern zone; the 43 MMDAs from Ashanti, representing the middle zone, and the 28 MMDAs from the three northern regions representing the northern zone. Additionally, the 50 SHS from the southern zone, 128 from the middle and 50 from the northern. The Police Command, Prisons, Armed Forces, GNFS, Immigration and Customs in Greater Accra, Ashanti and "Northern" Region were also to participate in the study with 1 participant from

each service from each zone. Three hundred and thirty (330) participants actually responded to the questionnaire as the next table shows:

Table 1 Actual Number of Participants Per Sector and Zone

Sector	Greater Accra	Ashanti	Northern	Total
MMDAs	27	38	24	89
SHS	45	128	50	223
Police	1	1	1	3
Military	1	1	1	3
Prisons	1	1	1	3
GNFS	1	1	1	3
Immigration	1	1	1	3
Customs	1	1	1	3
	78	172	80	330

The sampled participants comprised of individuals who were head teachers and administrators of senior high schools, human resource officers and direct directors of the MMDAs and human resource personnel in the regional commands of the security agencies selected. Table 1 above shows the actual number of participants that participated in the study. For the security agencies, the researcher purposively included one participant in each service in each zone to represent the institution at the zonal level. Of course, even though these participants represented their institutions, their responses do not necessarily represent the views or decisions of their institutions. The one person selected from a security agency spoke for the institution in the particular region or zone. For example, a staff officer of the police service in say Ashanti Region, responded to the questionnaire on behalf of say 2000 police officers in the region (middle zone). This

is similar to a head teacher or a human resource manager of an MMDA who will speak to the questionnaire concerning his SHS with say 150 or 200 staff or district of about 300 staff respectively.

Data Collection Instruments

Semi-structured questionnaire was used to collect quantitative data from participants. This contained close ended questions which allowed participants to select options from a set of multiple choice statements. There were open ended questions too that enabled participants to give opinion based responses. This gave a qualitative perspective to the research findings which made the discussion of findings more holistic. Structured questionnaire as noted by Mazikana (2023) is the most prevalent method of data collection. This is because of its relative ease of administration and analysis of responses. The researcher found this tool to be more suitable to use due to convenience. Additionally, an interview guide was used to collect in-depth, qualitative information from selected participants.

Data Collection Procedure

Questionnaire were administered to participants using the internet. The questionnaire was converted to electronic format, specifically, Google Forms and shared with the participants in the respective zones. The questionnaire had a part that enabled respondents who wish, to be able to access the researcher's identity as a student of Christian Service University College. The researcher kept monitoring the data as it came in gradually, until the required sample was reached. The interview guide was also used to collect information from selected participants through conversation over the telephone. The telephone conversation was recorded and transcribed later. The consent of participants was sought before recording the conversations.

Pre-Testing the Instrument

The questionnaire was pre-tested on a number of respondents from the target group. This was intended to test the reliability and validity of the responses to the questions. Feedback received included the length of time used to fill the questionnaire, as well as lack of clarity of some of the questions. This feedback was used to amend the questions before the final data collection.

Data Processing and Analysis

Quantitative responses from participants were cleaned, assigned numerical codes and entered into SPSS software version 20.0. The software was used to perform descriptive statistics which led to the generation of frequencies, tables and graphs. Cross tabulations were used to examine the relationships within the data. Chi-square test was used to compare observed data with expected data. Chi-square was also used in testing the two hypotheses at a 95% confidence level to determine significant relationships between variables. Qualitative data received from the open ended questions were categorized based on themes. Same was done for the information gathered using the interview guides. The audio recordings were transcribed, carefully noting which respondent gave which response. Direct quotations were included in the study findings.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

The objective of the study was to find out the availability of workplace HIV policy in the selected public sector institutions in the southern, middle and northern zones of Ghana, as well as usage of the policy and its impact on the welfare of employees. This chapter discusses the results of the study after the data was analyzed.

Background of the Institutions

This describes the characteristics of respondents and their institutions. These characteristics included respondents' regions, districts, job titles or positions (ranks), staff strength and age of the institutions. Participating institutions were selected from three regions. Table 2 below shows the number of institutions per sector and per region/zone that participated in the study.

Three hundred and thirty (330) individuals participated in the study from the selected institutions. Seventy-eight (78) of them, made up of 45 SHS, 27 MMDAs and 6 from the Security Services participated from the Greater Accra Region. Hundred and seventy-two (172) of them, made up of 128 SHS, 38 MMDAs and 6 from Security Services also participated from the Ashanti Region and Eighty (80) of them, made up of 50 SHS, 24 MMDAs and 6 from Security Services were from the Northern Region also took part in the study. Ashanti region represented 52.12% of total participants, Greater Accra covered 23.64% of participants while 24.24% of participants were from the Northern Region.

Table 2 Workforce of Organizations

Regions	SHS	MMDA	Police	Military	Prisons	GNFS	Immigration	Customs	Total
Gt. Accra	45	27	1	1	1	1	1	1	78
Ashanti	128	38	1	1	1	1	1	1	172
Northern	50	24	1	1	1	1	1	1	80
	223	89	3	3	3	3	3	3	330

Source: Field data, August 2023

Staff Strength of Institutions

Majority of institutions that participated in the study had above 100 personnel. In fact, for the security agencies, the workforce was in several thousand for a zone. Most of the SHS had between 100 and 200 staff. For the MMDAs, a number of districts had either 20 to 50 staff or 51 to 100 staff. The municipalities had 201 and 300 staff; metropolitan assemblies had over 500 staff. Clearly, most of the participant institutions had high staff numbers, and warranted that they had a workplace HIV policy.

Table 3 Workforce of Institutions Studied

Sector of organization	What is your organization's workforce?						Total
	20 to 50	51 to 100	101 to 200	201 to 300	301 to 500	500 plus	
SHS/GES	20	33	100	70	0	0	223
MMDA	12	36	13	7	14	7	89
Police	0	0	0	0	0	3	3
Military/Army	0	0	0	0	0	3	3
Prisons	0	0	0	0	0	3	3
GNFS	0	0	0	0	0	3	3
Immigration	0	0	0	0	0	3	3
Customs	0	0	0	0	0	3	3
Total	32	69	113	77	14	25	330

Source: Field data, August 2023

Age of Institutions

The researcher investigated the ages of the institutions studied. In fact, all the security agencies were above fifty (50) years of age. Majority of the SHS were also over twenty (20) years; some SHS are in fact, fifty (50) years and above. It is similar with the MMDAs. Fifteen (15) of them are over fifty (50) years, eleven of them are between thirty-one (31) and fifty (50) years whiles twenty-four of them are between eleven (11) and twenty (20) years. Sixteen (16) are up to ten (10) years old. Considering the ages of the institutions studied against their staff numbers, they have all been in existence for such a long time and have large staff numbers, such that HIV policy should exist for these workplaces.

Table 4 Ages of Institutions Studied

Institution	How old is your organization?						Total
	Under 5	5 to 10	11 to 20	21 to 30	31 to 50	50 years plus	
	years	years	years	years	years		
SHS	2	76	0	69	37	39	223
MMDA	8	8	24	23	11	15	89
Police	0	0	0	0	0	3	3
Military/Army	0	0	0	0	0	3	3
Prisons	0	0	0	0	0	3	3
GNFS	0	0	0	0	0	3	3
Immigration	0	0	0	0	0	3	3
Customs	0	0	0	0	0	3	3
Total	10	84	24	92	48	72	330

Source: Field data, August 2023

Availability of Workplace HIV Policy

Generally, the study found that availability of workplace HIV policy was extremely low in all the sectors studied. Seventy percent (70.30%) had no policy in

place. 16.9% of respondents did not know whether their institutions had a policy. 6.67% were not sure if their institution had a policy or not. Only 6.06% actually confirmed having a workplace HIV policy in place as shown in Figure 8. This confirms the findings of previous studies conducted on the availability of workplace HIV policy, including Dicardi-Nelson and Nsiah-Pepurah (2011) and Chatora et al, 2018 who studied the phenomenon in Ghana and Zambia respectively. In the case of this study, the conclusion is that HIV policy is barely available in the public institutions in Ghana.

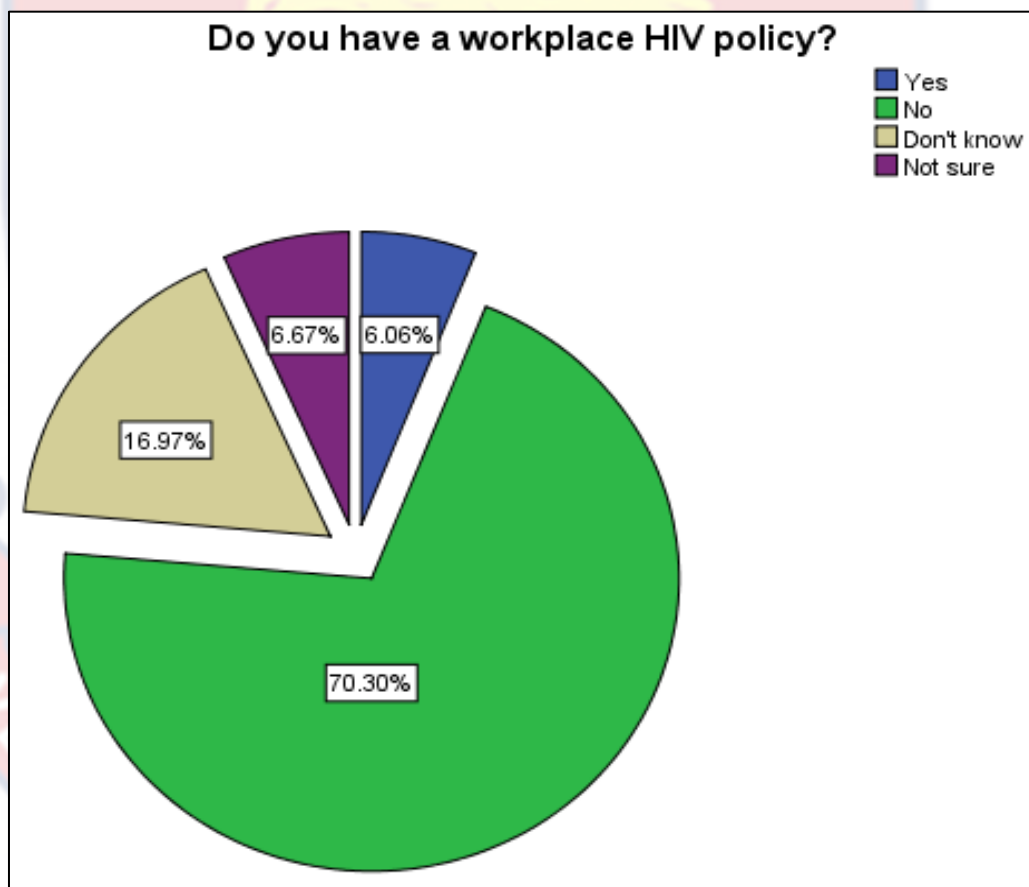


Figure 8: Pie Chart Showing Availability of Workplace HIV Policy

Source: Field data, August 2023

In terms of which sector had a policy, it was found that a few SHS had it and the Prisons Service also did (revealed through literature review). None of the MMDAs and the other security services had a policy. Some of the respondents either did not

know whether their institutions had a policy or not, and some too were not sure about it. When a DSP in the Ashanti Regional Command of the Ghana Prisons Service was asked whether the service has a workplace policy, he said:

“No, no, no, I haven’t sighted anything like that. I haven’t come across any workplace HIV policy since I joined the service. If there is one and I haven’t seen it fine.”

Interestingly, the researcher had chanced upon a workplace HIV policy that the Ghana Prisons Service had developed in the year 201 during the literature search¹. The officer was learning about this for the first time from the researcher. The researcher concluded with the officer’s agreement, that the fact that he and his colleagues never knew about the existence of a policy meant that the management of the service was not disseminating the policy enough. As mentioned earlier, HIV policy was absent in all the sectors studied.

Participants were asked concerning why their organizations did not have a policy and 65.76% said they did not know Ghana had a national workplace HIV policy. Indeed, this shows that the Ghana AIDS Commission has a great responsibility to create awareness about the policy and advocate for the adoption implementation of the policy. 11.52% said they did not know how to get the policy for their organizations, while 3.64% held the view that policies are expensive to formulate and implement. 19% also felt that specially made workplace HIV policy is not necessary. One SHS teacher made the following comment:

“Most people get information on HIV from television and radio, and social media. This is the information they base their knowledge about HIV on. I personally feel that HIV policy at the workplace will not make

any difference. People know that HIV is transmitted through sexual intercourse and sharp objects.”

Assistance to Obtain a Policy

Wanting to investigate participants' interest in the policy, the researcher asked whether they will welcome assistance to formulate one. An overwhelming 83.64% answered affirmatively, indicating that the policy will receive a wide acceptance by the working world if it is given the necessary advocacy and sensitization.

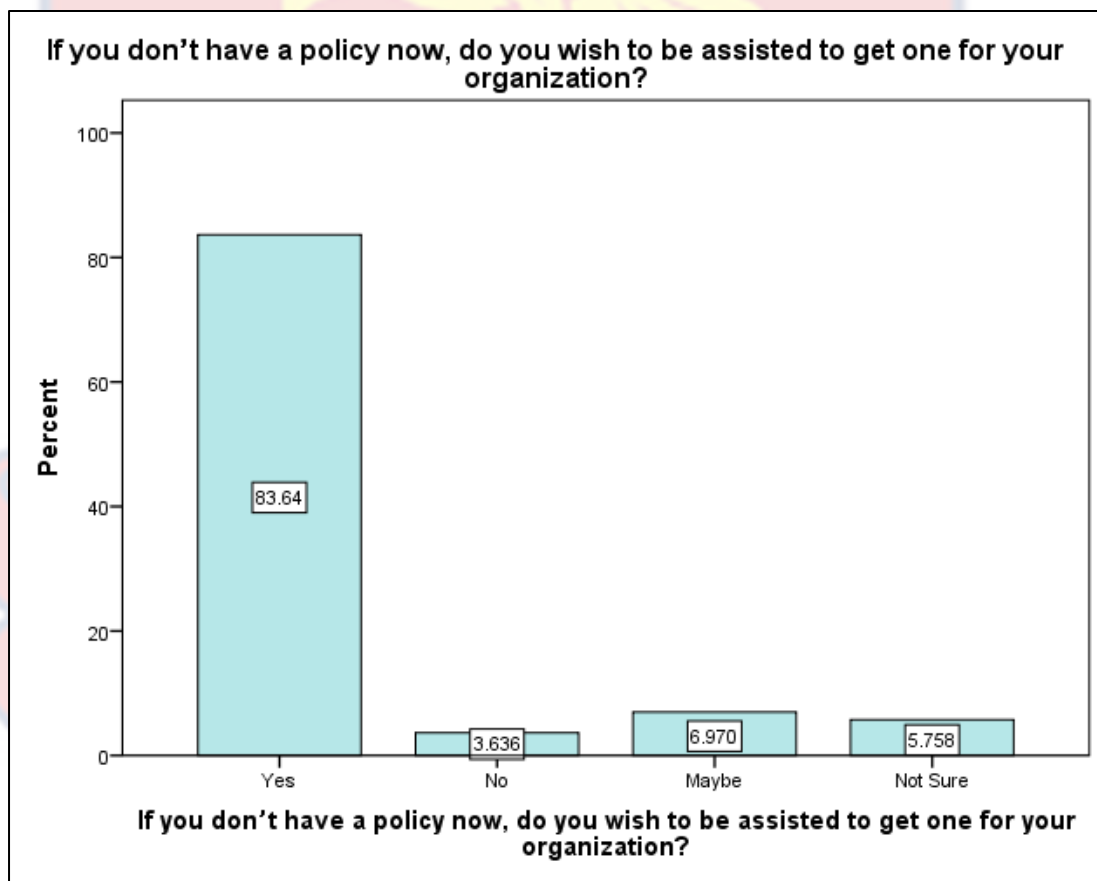


Figure 9 Bar Graph Showing Institutions' Willingness to Accept Help to Get a Workplace HIV Policy

Source: Field data, August 2023

Alignment of Policies with GAC's Workplace HIV Policy

Twenty (20) senior high schools had a policy, representing 6.06% of the sample studied. It was found that only 45% of the institutions having a policy actually made a conscious effort to align their policy to the national one. The remaining 55% did not.

The following are some of the comments during the interview on this:

“The previous school administration did the policy. I am sure management involved staff in the discussions on what should get into the policy.” – SHS respondent, Northern Region

“A consultant was hired to do it for us. I remember, when the first draft came, we all looked through and made changes. Both management, teachers and non-teaching staff. We all were involved.” – SHS Respondent, Greater Accra

“We don't have some HIV policy in our organization so I can't best tell” – SHS respondent, Ashanti region

Utilization of Workplace HIV Policy

It is certainly one thing to have a policy, and quite another thing following through to implement. The participating institutions were asked how staff are made aware of the policy. Figure 10 below shows the strategies used to reach staff with the policy.

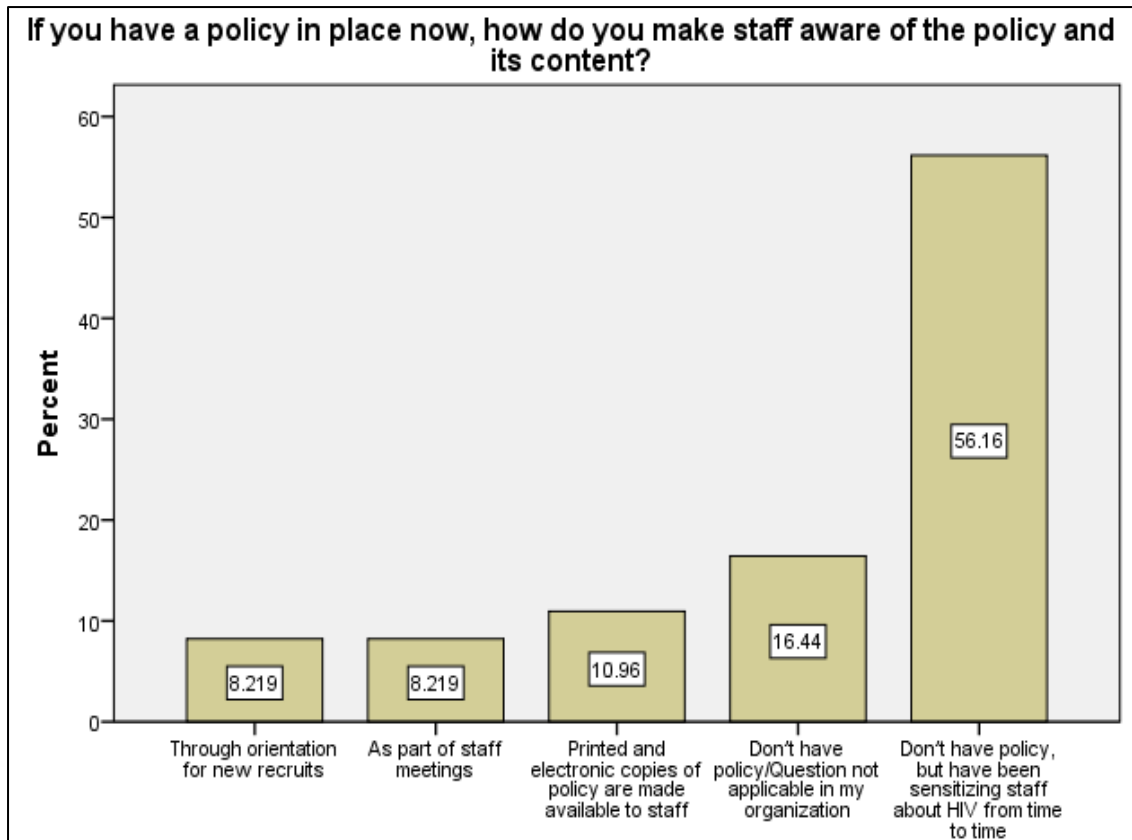


Figure 10 Bar Graph Showing Policy Dissemination Strategies by Institutions

Source: Field data, August 2023

The strategies included involving the policy in the orientation for new staff, talking about the policy and its content during staff meetings, as well as making electronic copies available to staff members. Interestingly, this question was answered by both institutions that have a policy and those that do not. And the largest response was given by institutions without a policy; that even though they do not have a policy, they sensitize staff about HIV from time to time.

Indeed, institutions that had a policy and those that did not, both held HIV activities for staff.

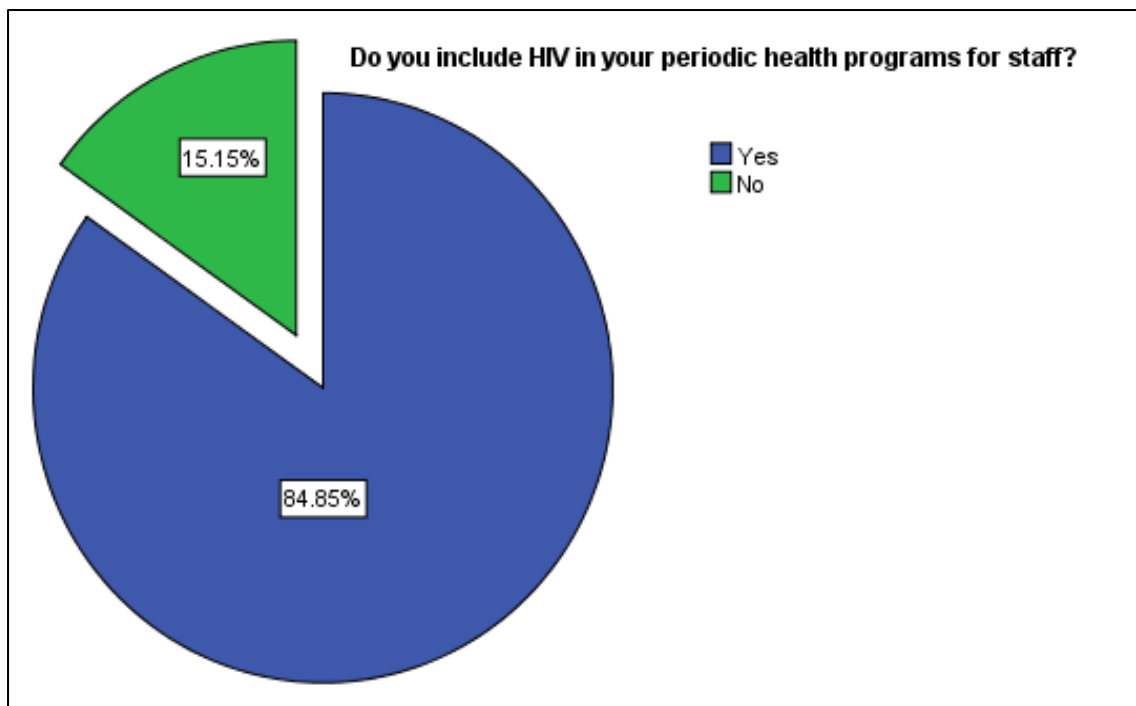


Figure 11 Pie Chart Showing Implementation of HIV Programs for Staff

Source: Field data, August 2023

Monitoring and Evaluation of Workplace HIV Policy

The researcher investigated the availability of M&E plan for the institutions that had a policy. None of those institutions had an M&E plan to monitor the performance of their policies. And none of the institutions ever monitored their policy and HIV activities. Ironically, about 4% of the institutions without a policy had a monitoring plan for activities they carry out on HIV for staff. In association with research objective 2, it was seen that policy monitoring and evaluation was ineffective since the institutions with a policy did not even have M&E plans in the first place. This finding confirms earlier findings of Chatora et al (2018), that workplaces have a notable difficulty with respect to monitoring and evaluation of programs.

Table 5 Cross tabulation of Availability of workplace HIV policy and Whether there is are M&E Plan/Frameworks

Do you have a workplace HIV policy	Is there a plan or framework for monitoring and evaluating your HIV policy and workplace HIV programs?		Total
	Yes	No	
Yes	0	20	20
No	9	223	232
Don't know	3	53	56
Not sure	0	22	22
Total	12	318	330

Source: Field data, August 2023

Asked why they were unable to monitor their policy and HIV activities; institutions' responses are as shown in table 6 below. The most cited reason was that they were not monitoring because there was no plan for it.

Table 6 Cross tabulation of Sector of Organization and Why there is No Policy

Sector	If you are unable to monitor, what are the reasons?			Total
	Because there is no monitoring plan	We do not have personnel tasked to monitor	We have nothing to monitor because we don't implement the policy	
SHS/GES	162	15	46	223
MMDA	65	5	19	89
Police	1	2	0	3
Military	2	1	0	3
Prisons	2	0	1	3
GNFS	3	0	0	3
Immigration	2	1	0	3
Customs	1	0	2	3
Total	238	24	68	330

Source: Field data, August 2023

Bivariate Analyses

In this section, the researcher analyzes one variable in relation to another to see the relationship between the two, or how one variable influences the other, etc. Bivariate analysis is used to determine the impact of availability of HIV policy or otherwise on variables such as HIV testing as a condition for recruitment; implementation of workplace HIV programmes; incidence of HIV related stigma and discrimination at the workplace among others. The main technique used in the bivariate analysis is cross tabulation which helps to deduce frequencies and percentages to make the relationships easy to understand.

Availability of Policy and HIV Test Requirement

Some differences were found between the institutions with a policy and those without, in the matter of requiring HIV test as part of recruitment health screening. Institutions that had a policy and those that did not, both required that HIV test is done. However, there is a lower margin of requirement by those with a policy than those without. For example, only one (1) institution out of the twenty (20) that had a policy required HIV testing during recruitment, representing 5% of those institutions. On the other hand, twenty-eight (28) institutions out of the two hundred and thirty-two (232) institutions that did not have a policy required HIV testing as part of recruitment health screening, representing 12% of these institutions.

Clearly, the availability of a policy is seen to significantly reduce the use of HIV status as a condition for employment. As seen on the other hand, this was not the case with institutions without a policy. In fact, the intention to test may be because the management of such institutions want to be sure that they are recruiting personnel fit for the job. Perhaps, they want to know the health condition of staff and know which of them to provide certain healthcare facilities for. However, should they on the basis of

the HIV status of prospective staff to not recruit them will be in contravention with the clause in the GAC Act that says that a person's HIV status shall not be one of the factors to determine eligibility for recruitment by an organization. A cross tabulation of whether an institution had a policy and whether they required HIV test as part of recruitment health screening is shown in table 7.

Table 7 Cross tabulation of Policy Availability and Whether HIV Test is Required for Recruitment

Do you have a workplace HIV policy?	Do you require HIV test as part of recruitment health screening?		Total
	Yes	No	
Yes	1	19	20
No	28	204	232
Don't know	1	55	56
Not sure	2	20	22
Total	32	298	330

Source: Field data, August 2023

Availability of Policy and Implementation of Workplace HIV Programs

HIV programs at the workplace is central to every good workplace HIV policy. These programs are used to provide education on HIV transmission, prevention and treatment, as well as how to relate to colleagues living with HIV. In this study, it was found that the availability of a policy on HIV did not necessarily affect the implementation of HIV programs and activities for staff. Both the institutions that had a policy and those that did not, all included HIV activities in their health programs for staff at an equal margin. As seen in Table 8 (cross-tabulation), 17 out of 20 institutions that had a policy included HIV activities in their health programs, representing 85% of those institutions. In the same vein, 207 out of the 232 institutions that did not have a

policy also included HIV activities in their health programs, representing 89.22% of those institutions.

The second hypothesis was in relation to this question of whether there was a relationship between availability of a policy and implementation of HIV programs. Using Chi-Square test, it was found that the X^2 critical value was 7.82 while the X^2 obtained was 14.87 which meant that the X^2 critical was less than the X^2 obtained value. The researcher therefore rejected the null hypothesis and concluded that there is a relationship between availability of policy and the implementation of HIV activities. This is in agreement with the findings of Chatora et al (2018) that there was a very high proportion of implementation of HIV and AIDS activities wherever a policy was available.

Table 8 Cross tabulation of Availability of Workplace HIV policy and Implementation of HIV Programs for staff

Do you have a workplace HIV policy?	Do you include HIV in your periodic health programs for staff?		Total
	Yes	No	
Yes	17	3	20
No	207	25	232
Don't know	39	17	56
Not sure	17	5	22
Total	280	50	330

Source: Field data, August 2023

Although this seems to undermine the relevance of workplace HIV policy, qualitative interviews conducted indicated that HIV policy is very essential to handle peculiar issues bothering on HIV related stigma, discrimination and other human rights

violations being perpetrated in some institutions. For instance, the following comments were made by some of the respondents:

“To be honest, health issues affect all of us. without a policy, there is so much silence About HIV in the schools. And you know, staff and students are involved in relationships but because there is no policy, people do things without thinking about the risks. If there is a policy, education on AIDS will go to all in the school setting, and it will help a lot. GES must get the HIV policy for all schools” – SHS respondent, Greater Accra

“I have been to South Africa and soldiers with HIV travel on peace missions. In Ghana, if you have HIV, you will not be allowed to travel. I was in Lebanon last year and in a conversation with a colleague from South Africa, he was surprised to learn that HIV positive Ghanaian soldiers are not allowed to travel. In Ghana, there is too much stigma and discrimination against soldiers with HIV. The GAC is not aware of this, otherwise they would have written to the military high command to address this” – Military respondent, Greater Accra

“It is not good we don't have a policy. Because, if there is a policy, we will all be guided by its content, and knowing what benefits a staff may derive in case he or she gets infected in the line of duty will help staff to work wholeheartedly, knowing that even if the unfortunate happens, he or she is entitled to some benefits” – CUSTOMS respondent, Northern

Region

The comments above show that, although quantitatively, majority of respondents claimed implementing HIV activities for staff, as if a policy makes no

difference, that is not really the case. There is the need the need for policy to regularize or standardize HIV issues in the world of work, and the Ghana AIDS Commission has a lead role to play in this.

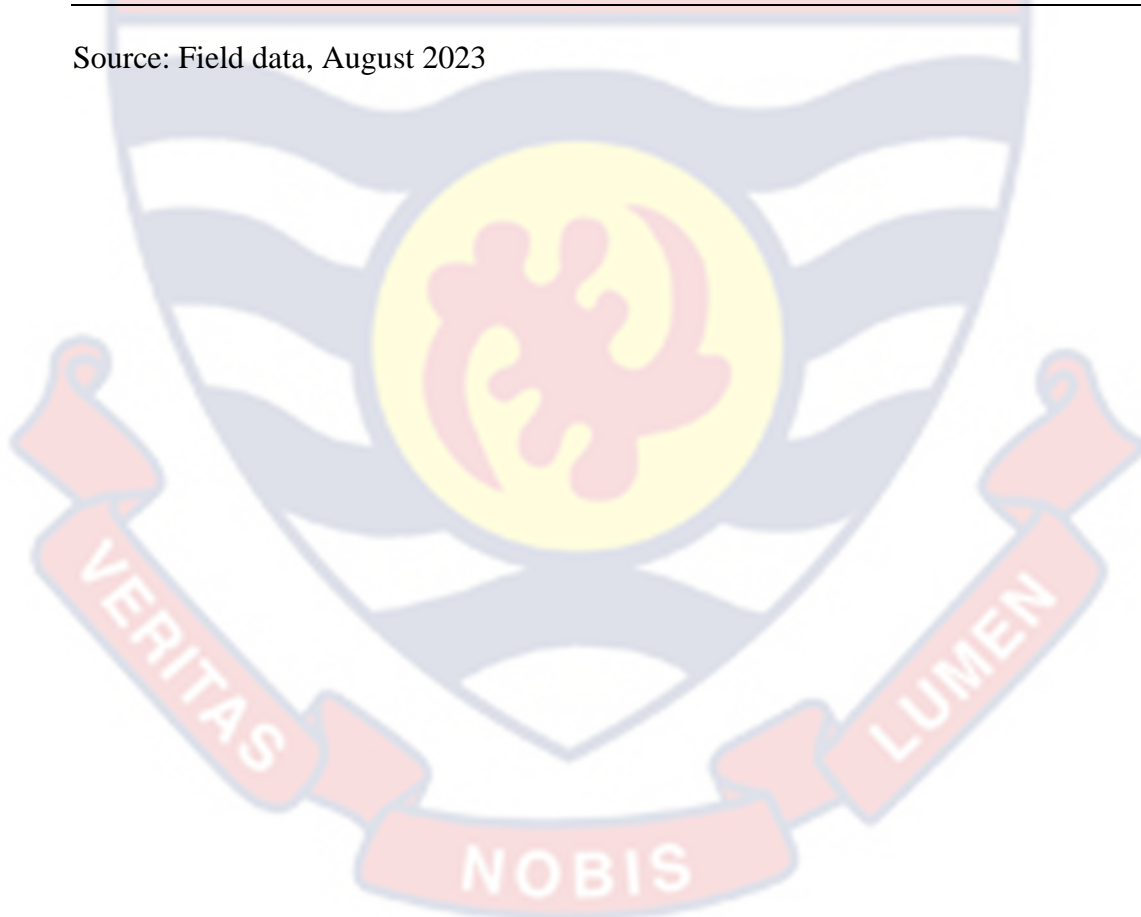
Availability of Policy and HIV Related Stigma and Discrimination

As already indicated, a policy sets out a code of conduct. Policy on HIV will obviously make it clear to all staff that stigma and discrimination against people infected or affected by HIV is impermissible, in line with the GAC Act 938 and Regulations 2403. The researcher tried to find out if stigma levels were any different in institutions with a policy from those without one. It was found that there was 0% record of stigma and discrimination in the institutions having a policy, contrary to institutions that did not have a policy, which recorded almost 5% of HIV related stigma and discrimination. In fact, as the following table shows, when institutions that did not have a policy, those that were not sure they had and those that did not know they had a policy are summed up, we realize there was 7.62% HIV related stigma and discrimination on those institutions.

Table 9 Cross tabulation of Availability of Workplace HIV Policy and Whether any staff in the organization ever been laid off, faced HIV-related stigma and discrimination, or died due to AIDS-related causes.

Do you have a workplace HIV policy	Has any staff in your organization ever been laid off, faced HIV-related stigma and discrimination, or died due to AIDS-related causes?		
	Yes	No	Total
Yes	0	20	20
No	11	221	232
Don't know	7	49	56
Not sure	4	18	22
Total	22	308	330

Source: Field data, August 2023



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This final chapter discusses the research findings based on the objectives. The conclusions are derived from the findings based on which recommendations are made.

The objective of this research was to investigate the extent to which public sector institutions had adopted the workplace HIV policy of the Ghana AIDS Commission. It was also the aim of the study to find out if institutions that had a policy were actually had the content of the policies being aligned to the national one, and how the policy translated into workplace HIV programs to impact on the welfare of staff, and whether monitoring and evaluation plans were in place to monitor the policies and HIV programs. The study employed a mixed method cross sectional design, drawing samples from the security services, MMDAs and senior high schools from the southern, middle and northern zones of Ghana. From the literature review, two hypotheses were formulated to guide the research, the first being that there is a relationship between the size of an institution and the availability of HIV policy and the second being that there is a relationship between availability of workplace HIV policy and implementation of HIV programs.

Summary of Key Findings

The first objective was to identify the availability of HIV policy at the public institutions included in the study. From the quantitative data analysis, it was found that workplace HIV policy existed in only 6% of the institutions studied and these were all senior high schools. None of the MMDAs had a policy. The researcher during the literature search chanced upon a policy developed by the Ghana Prisons Service in the year 2011. Meanwhile, during the qualitative telephone interviews, the prisons service

respondents interviewed did not know that their institution had an HIV policy. This means that the policy had been shelved and staff were not made aware of its existence. Aside the Prisons Service, none of the other security agencies had a policy. The findings on this research question points out that HIV policy is virtually absent in Ghana's public institutions. This finding is in line with previous studies such as Dicardi-Nelson and Nsiah-Peprah (2011) and Chatora et al (2018) who found minimal availability of HIV policy in the institutions they studied. The first hypothesis was in relation to objective one. After computing for the test statistic using Chi-Square test, it proved that the X^2 critical value was 25 while the X^2 obtained was 42.03 which meant that the X^2 critical was less than the X^2 obtained value. The researcher therefore rejected the null hypothesis and concluded that there is a relationship between size of institution and availability of workplace HIV policy.

The second objective was to investigate effectiveness of implementation of workplace HIV policy in institutions that had them. it was found that the availability of a policy on HIV did not significantly determine the implementation of HIV programs and activities for staff. Both the institutions that had a policy and those that did not, all included HIV activities in their health programs for staff at an equal margin. For instance, 85% of institutions that had a policy included HIV activities in their health programs. In the same vein, 89.22% of institutions that without a policy also included HIV activities in their health programs. The second hypothesis was in relation to this second objective, that there is a relationship between availability of a policy and implementation of HIV programs. After computing for the test statistic using Chi-Square test, it was found that the X^2 critical value was 7.82 while the X^2 obtained was 14.87. This means that the X^2 critical is less than the X^2 obtained value. The researcher therefore rejected the null hypothesis and concluded that there is a relationship between

availability of policy and the implementation of HIV activities. This is in agreement with the findings of Chatora et al (2018) that there was a very high proportion of implementation of HIV and AIDS activities wherever a policy was available. Talking about the effectiveness of the implementation of HIV policy and programs comes the issue of monitoring and evaluation. The researcher therefore investigated how effective monitoring and evaluation of HIV policy and programs were. Unfortunately, it was found that none of the institutions with a policy had a monitoring and evaluation plan in place, and they did not monitor their policy and programs.

The third and final objective was to assess the impact of policy availability or otherwise on employee welfare and on the institution. Although both those that had a policy and those without required pre-recruitment HIV testing, there was a lower margin of requirement by those with a policy than those without. For example, while only 5% of institution with a policy required HIV testing during recruitment, the practice was found in 12% of institutions without a policy. This is confirmed in the narration of a military respondent who pointed to the denial of HIV positive military personnel from international traveling on peace and other mission (see page 49). Additionally, it was found that there was 0% record of stigma and discrimination in the institutions having a policy, contrary to institutions that did not have a policy, which recorded almost 5% of HIV related stigma and discrimination. This is certainly not favorable to the welfare of employees.

Conclusions

In conclusion, this study has provided an insight into the current availability of workplace HIV policy in Ghana's public sector. It has been found that HIV policy is absent in the majority of the institutions involved in the study. If available, HIV policy translates into the implementation HIV programs for staff. Absence of a policy

contributes to HIV related stigma and discrimination at the workplace which is an infringement of workers' human rights.

Other revelations from this include that over 65% of institutions did not know there was a workplace HIV policy in Ghana for them to adopt for their institutions. Unsurprisingly, almost 12% also did not know how to get the policy for their institutions. This means that there is a major problem of lack of awareness as far as the policy is concerned. The GAC needs to publicize the policy well enough for institutions to become aware and adapt it for their staff.

Another interesting finding was that some participants were apathetic about the policy altogether. Nineteen percent (19%) of the participants in the study felt that in the current dispensation of technological proliferation where social media, television and radio are common, HIV policy is not necessary as these mass media are a source of information on virtually everything including HIV. This notion need to be addressed through public education and sensitization on the unique functions that a policy will perform, should the institutions adopt it for their staff.

One positive finding was that over 80% of participants expressed readiness to accept help to develop and implement the policy for staff. This is a window of opportunity for GAC to act upon to ensure that the various MDAs, MMDAs and all institutions for that matter, get the policy in place for their staff.

Finally, the study found that in institutions with a policy, the content of the policies did not align or conform to the national policy, and that is something that needs attention since standardizing the policies will contribute to achievement of the national policy goals. Related to this is that the study also found very low policy dissemination culture among institutions that had a policy. For example, although the Ghana Prisons

Service had a policy, the respondent who was a senior officer never knew about it, and he confirmed none of his colleagues knew about it.

Recommendations

Firstly, considering the very low availability of HIV policy, coupled with the general lack of awareness surrounding the policy, the researcher recommends that the Ghana AIDS Commission (GAC) should urgently embark on an intensive campaign to sensitize employers to get a workplace HIV policy for their institutions. This can be done through the engagement of the ministries and the mother organizations of the institutions. For example, GAC can engage the GES, OHLGS, the national headquarters of the security services etc. for them to develop the policy and implement same for their sub structures.

Secondly, implementation of HIV programs at the workplace should be mandatory. In this regard the researcher recommends legislation of the policy. Such legal backing will enable the GAC to enforce adoption of the policy by institutions.

Thirdly, GAC should collaborate with relevant bodies such as the employment ministry and CHRAJ to deal with issues of HIV related stigma and discrimination at the workplace whenever they occur.

It is finally recommended that institutions prioritize monitoring and evaluation of HIV policy and programs. Capacity building should be given to key staff in the institutions to enable them monitor and evaluate the performance of their policies, as well as the effectiveness of their HIV programs for staff. GAC should also include monitoring of workplace HIV policy in their scheme of work to ensure institutional compliance with policy requirements.

Suggestions for Further Research

The researcher recommends that future studies on the subject should target the informal sector.



REFERENCES

- Adwok, J. (2015) Probability Sampling - A Guideline for Quantitative Health Care Research. The ANNALS of AFRICAN SURGERY. Review Paper
- Akwara, Priscilla A., Gabriel B. Fosu, Pav Govindasamy, Silvia Allayon, and Ani Hyslop. 2005. An In-Depth Analysis of HIV Prevalence in Ghana: Further Analysis of Demographic and Health Surveys Data. Calverton, Maryland, USA: ORC Macro.
- Anderson, J. E. (1997) Public Policy-Making: An Introduction 3rd ed. Boston: Houghton Mifflin Company.
- Appiah, F. et al (2022). Association Between Mass Media Exposure and Endorsement of HIV-Infected Female Teachers' Teaching: Insight from 2014 Ghana Demographic and Health Survey. BMC Women's Health. <https://doi.org/10.1186/s12905-022-01705-1>
- Asumeng, M. Asaman, L. Afful, J. and Agyemang, C. B. (2015) Occupational Safety and Health Issues in Ghana: Strategies for Improving Employee Safety and Health at Workplace. International Journal of Business and Management Review Vol. 3, No. pp. 60-79, October 2015. Published by European Center for Research Training and Development UK
- Asuquo E. F., Etowa J. B., Gifford W. A., Holmes D. (2016) Nurses' Involvement in HIV Policy Formulation in Nigerian Health Care System. J AIDS Clin Res 7: 589. doi:10.4172/2155-6113.1000589
- Bakuwa, R. (2010) Adoption of formal HIV and AIDS workplace policies: An analysis of industry/sector variations, SAHARA-J: Journal of Social Aspects of HIV/AIDS, 7:4, 2-9, DOI: 10.1080/17290376.2010.9724971
- Bets, A. (2023) How to Write a Research Design – Guide with Examples. (<https://www.researchprospect.com/how-to-write-a-research-design/>)
retrieved: 14th August 2023, 05:23am
- Bullock, L. and Lavis, J. N. (2019) Understanding the Supports Needed for Policy Implementation: A Comparative Analysis of the Intermediaries Across Three Mental Health Systems. Health Research Policy and Systems. Open Access. Bullock and Lavis Health Research Policy and Systems <http://doi10.1186/s12961-019-0479-1> (2019) 17:82
- Burkholder, M. (2019) The Impact of HIV/AIDS on Orphans in a South African Context. Pillars at Taylor University <https://pillars.taylor.edu/ovc-student/5>

- Centers for Disease Control and Prevention (CDC). Understanding Policy – Benefits of an HIV Policy. <http://cdc.gov/HIV/workplace/policy.html> Retrieved 12th August 2023
- Chatora et al. (2018). HIV/AIDS Workplace Policy Addressing Epidemic Drivers Through Workplace Programs. Chatora et al. BMC Public Health (2018) 18:180 DOI 10.1186/s12889-018-5072-y
- CIA, The World Factbook: HIV/AIDS – Adult Prevalence Rate – The World Factbook. www.cia.gov. Retrieved 2021-01-17
- Craib, I. (1997) Classical Social Theory. Oxford University Press
- Dicardi-Nelson and Nsiah-Pepurah, Y. (2011), Workplace Human Immune Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) Policy and Impact on Knowledge Levels: A Study of Private Companies in the Western Region. Journal of Science and Technology, Vol. 31, No. 1 (2011)
- Dwyer-Lindgren et al (2019) Mapping HIV Prevalence in Sub-Saharan Africa Between 2000 and 2017. Open Source Article. <https://doi.org/10.1038/s41586-019-1200-9>
- Etikan I, Alkassim R, Abubakar S (2015) Comparison of Snowball Sampling and Sequential Sampling Technique. Biom Biostat Int J 3(1): 00055. DOI: 10.15406/bbij.2015.03.00055
- Firliandini and Ahman, E. (2022) Human Resource Practices and Policies: A Literature Review. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 5, NO. 3, August 2022, Page: 21343-21356 e-ISSN: 2615-3076 (Online), p-ISSN: 2615-1715 (Print) www.bircu-journal.com/index.php/birci
- GAC (2014). Ghana AIDS Commission Country AIDS Response Progress Report 2014. https://www.unaids.org/sites/default/files/country.documents/GHA_narrative_report_2015.pdf Retrieved 1st August 2023 4:16am
- Gallo, R. C. and Montagnier, L., (2003) The Discovery of HIV as the Cause of AIDS. The New England Journal of Medicine
- Ghana AIDS Commission (2017). Ghana Men's Study (2017). Mapping and Population Size Estimation (MPSE) and Integrated Bio-Behavioral Surveillance Survey (IBBSS) Among Men who have Sex with Men (MSM) in Ghana (Round II). Accra, Ghana.

- Ghana AIDS Commission (2020). Population Size Estimation (PSE) and Bio-Behavioral Surveillance Survey (BBSS) Among Female Sex Workers (FSW) and Their Intimate Partners in Ghana.
- Ghana AIDS Commission National Strategic Plan 2021 – 2025
- Ghana AIDS Commission. 2022 National and Sub-National Estimates and Projections
- Ghana Armed Forces MOWIP Report, 2020. Results of the Measuring Opportunities for Women in Peace Operations (MOWIP) Assessment.
- Ghana Statistical Service (2014) Integrated business Establishment Survey Phase II, Summary Report page 72
- Ghana Statistical Service (2017). Statistical Yearbook (2012-2015) pages 291, 307,308.
- Glicken, M.D. (2003) Social Science: A Simple Guide. Pearson Education, Boston.
- Gomez-Diago, G. (2019). Functionalist Theory. The SAGE International Encyclopedia of Mass Media and Society. Pages 657-658. Online ISBN: 9781483375519 DOI: <http://dx.doi.org/10.4135/9781483375519.n260>
- Guure, C. et al (2020) Comprehensive Knowledge of HIV and AIDS Among Ghanaian Adults from 1998 to 2014: A Multilevel Logistic Regression Model Approach. Hindawi Scientifica Volume 2020, Article ID 7313497, 10 pages <https://doi.org/10.1155/2020/7313497>
- Halasa-Rappel, Y. A. et al (2021). The Tale of Two Epidemics: HIV/AIDS in Ghana and Namibia. The Open AIDS Journal. <https://openaidsjournal.com>
- ILO, 2013. Practical Guidelines for Developing and Implementing Workplace Policies and Programmes on HIV and AIDS. Based on ILO Experiences in the English- and Dutch Speaking Caribbean Countries.
- ILOAIDS, A workplace policy on HIV/AIDS: What it should cover. ILO Programme on HIV/AIDS and the world of work. International Labor Office, 4 route des Morillons, 1211 Geneva 22 Switzerland
- IN DANGER: UNAIDS Global AIDS Update 2022. Geneva: Joint United Nations Programme on HIV/AIDS: 2022. Licence: CC BY-NC-SA 3.0 IGO
- Ismail et al, (2021) Barriers to Timely Disclosure of HIV Serostatus: A Qualitative Study at a Care and Treatment Centers in Dar es Salaam, Tanzania. Plos One 16(8): e0256537. <https://doi.org/10.1371/journal.pone.0256537>

- Kapangama, P. (2021) Exploring Factors Affecting the HIV/AIDS Workplace Policy Development and Implementation in Selected Public Hospitals in Lilongwe, Malawi. Research Dissertation. University of Malawi College of Medicine
- Ke et al (2022). Psychological Wellbeing and Employability of Retrenched Workforce During Covid-19: A Qualitative Study Exploring the Mitigations for Post Pandemic Recovery Phase. *Frontiers in Public Health*. doi: 10.3389/fpubh.2022.907797
- Kothari, C. R. (2004) *Research Methodology – Methods and Techniques* (2nd Revised Edition). New Age International Publishers Limited, New Delhi
- Lartey, M. (2013) Effectiveness of the Implementation of the Workplace HIV/AIDS Policy and Technical Guidelines for the Health Sector at an Urban Tertiary Referral Hospital, Greater Accra Region, Ghana. <http://ugspace.edu.gh>
- Mahajan A. P. et al. (2007) An overview of HIV AND AIDS workplace policies and programmes in southern Africa. *AIDS*. 2007;21:S31–9. <https://www.ncbi.nlm.nih.gov/pubmed/17666960>. Accessed 10 July 2023.
- Mason, J. (2002) *Qualitative Researching*, 2nd Ed. London: Sage [Google Scholar]
- Maxwell, J. A. (2005). *Qualitative Research Design. An Interactive Approach*. SAGE.
- Mazikana, A. T. (2023) The Good Part of Using a Questionnaire: Advantages and Disadvantages. (Internet Source). Retrieved: 14th July 2023. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4386399
- Mbulaje, P. (2020) Evaluation of HIV and AIDS Workplace Policy at Nkhotakota District Council, Malawi. Research Thesis. University of Malawi, College of Medicine, Department of Public Health. doi.10.20944/preprints202004.0493.v1
- Moyo, E. et al (2023) Key Populations and Sub-Saharan Africa's HIV Response. *Frontiers in Public Health* 11: 1079990. doi: 10.3389/fpubh.2023.1079990
- National HIV and AIDS Policy, Universal Access to HIV Prevention, Treatment and Care Services Towards Ending AIDS as a Public Health Threat, Ghana AIDS Commission, September 2019.
- Nickerson, C. (2023) Dysfunction in Sociology. <http://simplysociology.com/dysfunction.html> Retrieved: 21st July 2023, 00:45:02
- Nketiah-Amponsah, E. and Afful-Mensah, G. (2013) A Review of HIV and AIDS Awareness and Knowledge of Preventive Methods in Ghana. *African Journal of Reproductive Health* December 2013 (Special Edition on HIV/AIDS); 17(4)

- Obilor, E. I. (2023) Convenience and Purposive Sampling Techniques: Are they the Same? *International Journal of Innovative Social & Science Education Research* 11(1):1-7, Jan.-Mar., 2023
- Owusu, A. Y. (2022) Experiences of New Diagnoses Among HIV Positive Persons: Implications for Public Health. *BMC Public Health*. Open Access Research Article. <https://doi.org/10.1186/s12889-022-12809-6>
- Purtle, J., Peters, R. and Brownson, R. C. (2016) A Review of Policy Dissemination and Implementation Research Funded by the National Institutes of Health, 2007-2014.
- Robinson, O. C. (2014) Sampling in Interview Based Qualitative Research: A Theoretical and Practical Guide. *Qualitative Research in Psychology* 11(1): 25-41. [Google Scholar]
- Saunders, M., Lewis, P. and Thornhill, A. (2012) *Research Methods for Business Students*. Pearson Education Ltd., Harlow.
- Standard Operating Procedures for Implementing HIV Programmes Among Key Populations, 2017.
- Tessema, B. T., Bune, G. T., and Mamo, Z. B. (2023) Non-Disclosure of HIV-Positive Serostatus: Unmatched Case – Control Study in People Living with HIV in Public Health Facilities of Gedeo Zone, Southern Ethiopia. *HIV/AIDS - Research and Palliative Care*. Dovepress downloaded from <https://www.dovepress.com/> on 16-Sep-2023
- Tongco, C. D. M. (2007) Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications. A Journal of Plants, People and Applied Research*
- Trost, J. A. (1986) Statistically Non-Representative Stratified Sampling: A Sampling Technique for Qualitative Studies. *Qualitative Sociology* 9(1): 54-57 [Google Scholar]
- Twinomugisha, B., Fungisai, G. O. and Marguerite, D. (2020) Exploring HIV-Related Stigma and Discrimination at the Workplace in Southwestern Uganda: Challenges and Solutions. *Hindawi Advances in Public Health*, Volume 2020, Article ID 8833166 <http://doi.org/10.1055/2020/8833166>
- UNAIDS Fact Sheet, 2017 Global HIV Statistics, UNAIDS, Geneva, Switzerland, 2018 http://www.unaids.org/sites/default/files/media_asset/UNAIDS_FactSheet_en.pdf.
- UNAIDS Fact Sheet, 2023. Source: UNAIDS 2023 epidemiological estimates.

Vargas-Hernandez et al, (2011) What is Policy, Social Policy and Social Policy Changing. International Journal of Business and Social Science. Vol. 2 No. 10, June 2011

West Africa AIDS Foundation (WAAF) Annual Report 2019. <https://waafweb.org/wp-content/uploads/2021/02/2019-Annual-Report-WAAF-1.pdf> Retrieved on 1st August 2023



APPENDIX

SEMI STRUCTURED QUESTIONNAIRE

CHRISTIAN SERVICE UNIVERSITY COLLEGE, KUMASI

ACADEMIC RESEARCH QUESTIONNAIRE

Topic: “An Inquiry into the Availability, Use and Impact of HIV Policy at Workplaces in Contemporary Ghana”

(This questionnaire should be answered by senior person in the HR Unit of your organization)

The researcher is a graduate student at the Christian Service University College, pursuing Master of Science in Monitoring and Evaluation. This questionnaire is for collection of data on the above topic. Data collected is purely for academic purposes only. Data from your organization will be handled confidentially. Thank you for your time spent to participate in this study.

PART 1: BACKGROUND INFORMATION**1. Region of respondent**

a) Greater Accra [] b) Ashanti [] c) Northern

2) District of respondent *(Please indicate your district)*

3. Job title/Position of respondent *(Please indicate your position)*

4. Sector of organization

a) SHS/GES [] b) MMDA [] c) Security Agency *(Please Specify)*_____

5. What is your organization’s workforce? *(Please indicate number of staff)*

6. How old is your organization? *(Please indicate number of years)*

PART 2: AVAILABILITY OF WORKPLACE HIV POLICY

7. Do you have a workplace HIV policy?

- a) Yes [] b) No []

8. If *No to question 7*, Why Not?

- a) Don't think it necessary []
b) Don't know there's such thing as workplace HIV policy in Ghana []
c) Don't know how to get such a policy in place []
d) Policies are expensive to formulate and implement []
e) Other reasons (*please specify*) _____

9. If you *don't have a policy now*, do you wish to be assisted to get one for your organization?

- a) Yes [] b) No []

10. If you have a policy, how was the formulation process like, in terms of staff consultations and involvement? (*Please explain briefly*)

11. Is your policy aligned with GAC's national workplace policy?

- a) Yes it is [] b) No, we did our policy according to our own standards []

PART 3: USE OF WORKPLACE HIV POLICY

12. If you have a policy in place now, how do you make staff aware of the policy and its content?

- a) Through orientation for new recruits
b) As part of staff meetings
c) Printed and electronic copies of policy are made available to staff
d) Poster(s) of main themes of the policy are at vantage points in the organization
e) Other strategies (*please specify*)
f) Don't have policy/Question not applicable in my organization
g) Don't have policy, but have been sensitizing staff about HIV from time to time

13. Do you require HIV test as part of recruitment health screening? a) Yes [] b) No []

14. What will you do if you discover that a member of staff has HIV?

- a) Terminate the staff's appointment
- b) Inform other staff of the situation so that all will be cautious
- c) Keep information confidential and ensure that the staff seeks HIV treatment services
- d) Keep information confidential and take no action about the situation
- e) Other actions (*Please specify*)

PART 4: IMPACT OF NON-AVAILABILITY OF POLICY (*Skip part if you have a policy*)

15. Do you require HIV testing as part of recruitment health screening?

- a) Yes []
- b) No []

16. What have you done in the past if you discovered that recruitment health screening results of a candidate qualified for appointment had HIV infection?

- a) Disqualified candidate because of the HIV positive status
- b) Gave candidate appointment regardless of their HIV status
- c) Gave the appointment but made sure other staff were aware of candidate's HIV positive status
- d) Other actions (*please specify*)

17. What have you done in the past if you discovered that a member of staff had HIV infection?

- a) Terminated staff's appointment
- b) Maintained staff, encouraged them to seek HIV treatment services
- c) Maintained staff, did nothing about their condition
- d) Maintained staff, informed other staff of the situation so that all will be cautious
- e) Maintained staff, kept information confidential

f) Other actions (*please specify*)

18. What will you do in the future if you discover that a member of staff has HIV?

a) Terminate staff's appointment

b) Maintain staff, encourage them to seek HIV treatment services

c) Maintain staff, do nothing about their condition

d) Maintain staff, inform other staff of the situation so that all will be cautious

e) Maintain staff, keep information confidential

f) Other actions (*please specify*)

19. Although you do not have HIV policy in place, do you include HIV in your periodic health programs for staff? a) Yes [] b) No []

20. In the last 12 months, how many times have you included HIV in a health program for staff?

a) None

d) Thrice

b) Once

e) Four Times

c) Twice

f) Five times or more

21. In the last 24 months, how many times have you included HIV in a health program for staff?

a) None

d) Thrice

b) Once

e) Four Times

c) Twice

f) Five times or more

23. In the last 36 months, how many times have you included HIV in a health program for staff?

a) None

d) Thrice

b) Once

e) Four Times

c) Twice

f) Five times or more

24. Has any staff in your organization ever been laid off, faced HIV-related stigma and discrimination, or died due to AIDS-related causes? a) Yes [] b) No []

PART 5: IMPACT OF AVAILABILITY OF POLICY (*Skip part if you do not have a policy*)

25. Do you require HIV test as part of recruitment health screening?

a) Yes

a) No

26. What have you done in the past if you discovered that recruitment health screening results of a candidate qualified for appointment had HIV infection?

a) Disqualified candidate because of the HIV positive status

b) Gave candidate appointment regardless of their HIV status

c) Gave candidate appointment but made sure other staff were aware of candidate's HIV positive status

d) Other actions (*please specify*)

27. What have you done in the past if you discovered that a member of staff had HIV infection?

a) Terminated staff's appointment

b) Maintained staff, encouraged them to seek HIV treatment services

c) Maintained staff, did nothing about their condition

d) Maintained staff, informed other staff of the situation so that all will be cautious

e) Maintained staff, kept information confidential

f) Other actions (*please specify*)

28. What will you do in the future if you discover that a member of staff has HIV?

a) Terminate staff's appointment

b) Maintain staff, encourage them to seek HIV treatment services

c) Maintain staff, do nothing about their condition

d) Maintain staff, inform other staff of the situation so that all will be cautious

e) Maintain staff, keep information confidential

f) Other actions (*please specify*)

29. Do you include HIV in your periodic health programs for staff?

a) Yes

b) No

30. Are the programs stated in your HIV policy? a) Yes [] b) No []

31. In the last 12 months, how many times have you included HIV in a health program for staff?

a) None

d) Thrice

b) Once

e) Four Times

c) Twice

f) Five times or more

32. In the last 24 months, how many times have you included HIV in a health program for staff?

a) None

d) Thrice

b) Once

e) Four Times

c) Twice

f) Five times or more

33. In the last 36 months, how many times have you included HIV in a health program for staff?

a) None

d) Thrice

b) Once

e) Four Times

c) Twice

f) Five times or more

34. Has any staff in your organization ever been laid off, faced HIV-related stigma and discrimination, or died due to AIDS-related causes? a) Yes [] b) No []

PART 5: MONITORING & EVALUATION OF HIV POLICY AND PROGRAMS

35. Is there a plan or framework for monitoring and evaluating your HIV policy and workplace HIV programs? a) Yes [] b) No []

36. Do you monitor the performance of your HIV policy activities and report on it?

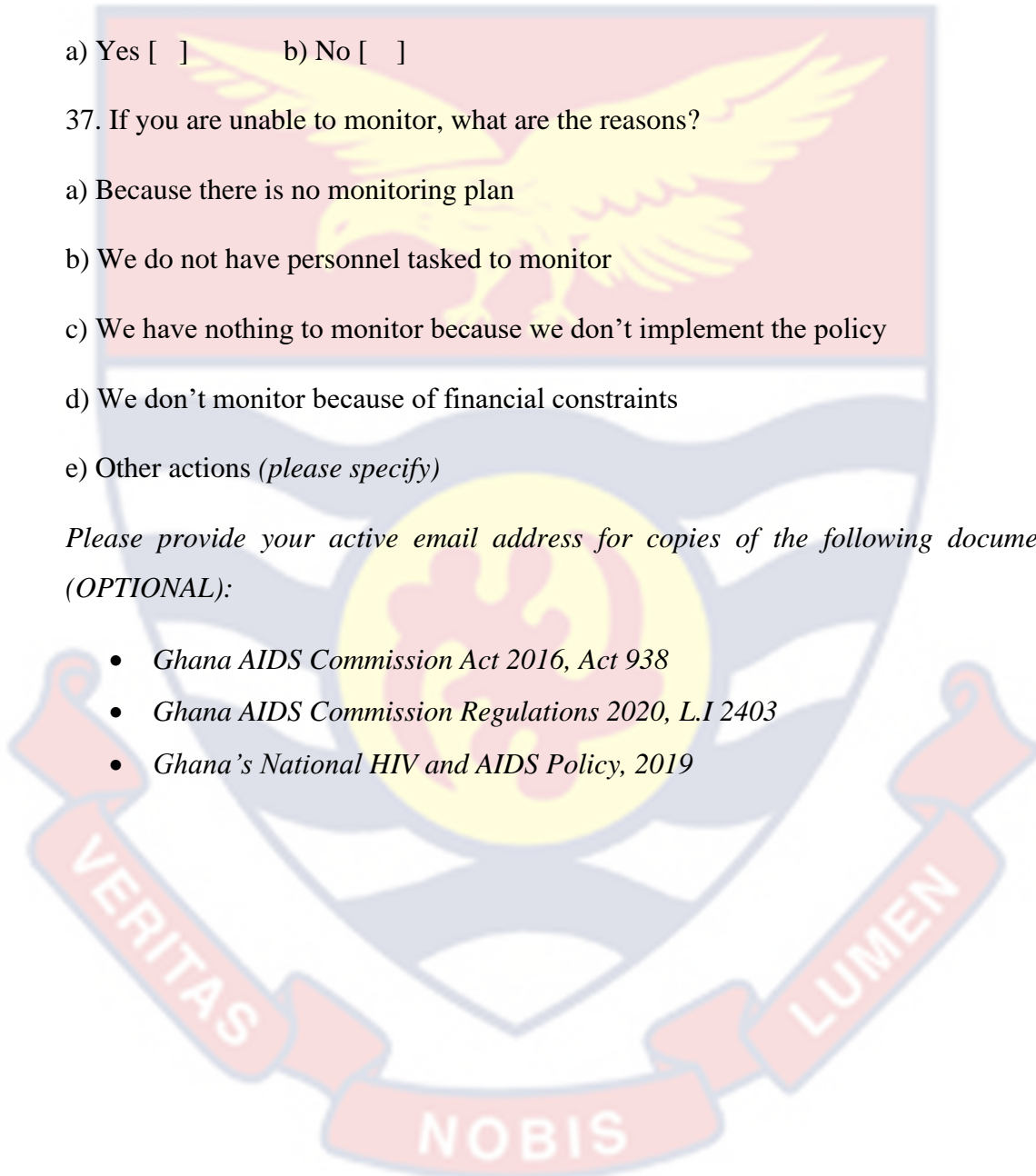
a) Yes [] b) No []

37. If you are unable to monitor, what are the reasons?

- a) Because there is no monitoring plan
- b) We do not have personnel tasked to monitor
- c) We have nothing to monitor because we don't implement the policy
- d) We don't monitor because of financial constraints
- e) Other actions (*please specify*)

Please provide your active email address for copies of the following documents (OPTIONAL):

- *Ghana AIDS Commission Act 2016, Act 938*
- *Ghana AIDS Commission Regulations 2020, L.I 2403*
- *Ghana's National HIV and AIDS Policy, 2019*



INTERVIEW GUIDE

CHRISTIAN SERVICE UNIVERSITY COLLEGE, KUMASI

INTERVIEW GUIDE FOR ACADEMIC RESEARCH

Topic: “An Inquiry into the Availability, Use and Impact of HIV Policy at Workplaces in Contemporary Ghana”

(This interview guide will be used to have an in-depth conversation with selected participants over the telephone)

The researcher is a graduate student at the Christian Service University College, pursuing Master of Science in Monitoring and Evaluation. This interview is to solicit information on the above topic. Information gathered is purely for academic purposes only. Please note that this telephone conversation will be recorded and transcribed for analysis. Be assured that the information will be handled confidentially. Thank you for your time spent to participate in this study.

Background

- Number of years in organization
- Staff numbers and recruitment procedures
- Notions/perceptions on cause(s) of diseases/ sicknesses

Awareness of Workplace HIV Policy

- Awareness of Ghana’s national workplace HIV policy
- Awareness and familiarity with the GAC Act 938, 2016

Availability of Workplace HIV Policy

- Availability of workplace HIV policy
- If available, when was it formulated?
- How was it formulated? (*Consultations, staff involvement, content and alignment with national guideline*)
- If you don’t have a policy, why not? Do you have plans to get one in place? Why/why not?

Launching and Dissemination and Use of Workplace HIV Policy

- How was the policy disseminated?
- How is the policy and its content shared with staff now?
- Any refresher orientations from time to time?
- Workplace HIV programs – implementation and frequency.
- Any budgetary allocation for implementing HIV programs for staff?

Monitoring and Evaluation of Workplace HIV Policy

- Is there a M&E plan/framework accompanying the policy?
- How do you monitor the performance of your HIV policy and programs?
- Challenges of implementation and M&E

Impact of Availability/Non-Availability of Workplace HIV Policy

- How has the availability of HIV policy benefited your organization?
- How has the availability of HIV policy benefited your staff?
- (How has the non-availability of HIV policy affected your organization?)
- (How has the non-availability of HIV policy affected your staff?)
- Has any of your staff ever died due to AIDS related causes in your organization?
- Has any of your staff ever been laid off or denied certain rights/opportunities due to their HIV positive status?

Concluding Remarks and Recommendations

- What do you suggest to be done to improve the implementation of workplace HIV policy and programs?
- Is there any other thing you would like to say in conclusion?

Appreciation

Thank you very much for your time and vital information provided.

Please provide your active email address for copies of the following documents

(OPTIONAL):

- *Ghana AIDS Commission Act 2016, Act 938*
- *Ghana AIDS Commission Regulations 2020, L.I 2403*
- *Ghana's National HIV and AIDS Policy, 2019*

TEST OF HYPOTHESES

HYPOTHESIS ONE – Chi- Square Test (X^2 test)

Chi-square is used to measure the relationship between two (2) variables.

- ✓ Hypothesis: Large institutions are more likely to have a workplace HIV policy in place

STEP ONE: (*Stating the null and alternate hypotheses*)

Let H_0 represent the Null Hypothesis (Independent variable)

H_1 , represent the Alternative Hypothesis (Dependent variable)

- H_0 : There is no relationship between size of institution and availability of workplace HIV policy
- H_1 : There is a relationship between size of institution and availability of workplace HIV policy

STEP TWO (*Decision rule*)

1. If the chi-square (X^2) obtained is greater than the X^2 -critical value, we reject the null hypothesis (H_0)
2. If the chi-square (X^2) obtained is less than the X^2 -critical value, we fail to reject the null hypothesis (H_0)

STEP THREE: (*Determining the X^2 -critical value*) At 95% Confidence level, alpha = 0.05

Degree of freedom (df) = $(R-1)(C-1) = (4-1)(6-1) = (3)(5) = \underline{15}$

The corresponding value for degree of freedom 15 on the chi-square table is 25.

Therefore, the X^2 critical value is 25

STEP FOUR: (*Calculating the test statistic*) Here, we use cross tabulation of 'size of institution' and 'availability of workplace HIV policy.'

Table 10 Cross tabulation of Size of Institution and Availability of Workplace HIV Policy

Size of Institution	Count	Do you have a workplace HIV policy?				Total
		Yes	No	Don't know	Not sure	
		0	31	1	0	32
20 to 50	Expected Count	1.9	22.5	5.4	2.1	32.0
	Count	1	50	9	9	69
51 to 100	Expected Count	4.2	48.5	11.7	4.6	69.0
	Count	12	75	21	5	113
101 to 200	Expected Count	6.8	79.4	19.2	7.5	113.0
	Count	7	42	20	8	77
201 to 300	Expected Count	4.7	54.1	13.1	5.1	77.0
	Count	0	14	0	0	14
301 to 500	Expected Count	.8	9.8	2.4	.9	14.0
	Count	0	20	5	0	25
500 plus	Expected Count	1.5	17.6	4.2	1.7	25.0
	Count	20	232	56	22	330
Total	Expected Count	20.0	232.0	56.0	22.0	330.0
	Count					

Table 11 Computing for the X^2 obtained value

CELL	F_o	F_e	$F_o - F_e$	$(F_o - F_e)^2$	$(F_o - F_e)^2 / F_e$
A	0	1.9	-1.9	3.61	1.9
B	1	4.2	-3.2	10.24	2.44
C	12	6.8	5.2	27.04	3.98
D	7	4.7	2.3	5.29	1.13
E	0	0.8	-0.8	0.64	0.8
F	0	1.5	-1.5	2.25	1.5
G	31	22.5	8.5	72.25	3.21
H	50	48.5	1.5	2.25	0.05
I	75	79.4	-4.4	19.36	0.24
J	42	54.1	-12.1	146.41	2.71
K	14	9.8	4.2	17.64	1.8
L	20	17.6	2.4	5.76	0.33
M	1	5.4	-4.4	19.36	3.59
N	9	11.7	-2.7	7.29	0.62
O	21	19.2	1.8	3.24	0.17

P	20	13.1	6.9	47.61	3.63
Q	0	2.4	-2.4	5.76	2.40
R	5	4.2	0.8	0.64	0.15
S	0	2.1	-2.1	4.41	2.10
T	9	4.6	4.4	19.36	4.21
U	5	7.5	-2.5	6.25	0.83
V	8	5.1	2.9	8.41	1.65
W	0	0.9	-0.9	0.81	0.9
X	0	1.7	-1.7	2.89	1.7
TOTAL	330	329.7	0.3	438.77	X ² Obtained: 42.03

NB: F_o - Observed frequency F_e - Expected frequency X^2 Obtained = 42.03

STEP FIVE (Making a decision)

After computing for the test statistic, it proved that the X^2 - critical value was 25 while the X^2 obtained was 42.03. This means that the X^2 - critical is less than the X^2 obtained value.

We therefore reject the null hypothesis according to the decision making rule stated. Rejecting the null hypothesis means that there is a significant relationship between size of an institution and the availability of workplace HIV policy.

This confirms the researcher's hypothesis that large institutions are more likely to have a workplace HIV policy than small institutions.

HYPOTHESIS TWO – Chi- Square Test (X^2 test)

Chi-square tries to measure the level of association between two (2) variables.

- ✓ Hypothesis: **Institutions with a policy are more likely to implement HIV programmes**

STEP ONE: (Stating the null and alternate hypotheses)

Let H_0 represent the Null Hypothesis (Independent variable)

H_1 , represent the Alternative Hypothesis (Dependent variable)

H₀: There is no relationship between availability of workplace HIV policy and implementation of HIV programmes

H₁: There is a relationship between availability of workplace HIV policy and implementation of HIV programmes

STEP TWO (*Decision rule*)

1. If the chi-square (X^2) obtained is greater than the X^2 -critical value, we reject the null hypothesis (H_0)
2. If the chi-square (X^2) obtained is less than the X^2 -critical value, we fail to reject the null hypothesis (H_0)

STEP THREE: (*Determining the X^2 -critical value*) At 95% Confidence level, alpha = 0.05

$$\text{Degree of freedom (df)} = (R-1)(C-1) = (4-1)(2-1) = (3)(1) = \underline{\underline{3}}$$

The corresponding value for degree of freedom 3 on the chi-square table is 7.82.

Therefore, the X^2 critical value is 7.82

STEP FOUR: (*Calculating the test statistic*) Here, we use cross tabulation of respondents' education and whether or not they go to hospital with all kinds of diseases.

Table 12 Cross tabulation of Availability of Workplace HIV Policy and Implementation of HIV Programs

<i>Do you have a workplace HIV policy?</i>		<i>Do you include HIV in your periodic health programs for staff?</i>		Total
		Yes	No	
Yes	Count	17	3	20
	Expected	17.0	3.0	20.0
No	Count	207	25	232
	Expected	196.8	35.2	232.0
Don't know	Count	39	17	56
	Expected	47.5	8.5	56.0
Not sure	Count	17	5	22
	Expected	18.7	3.3	22.0
Total	Count	280	50	330
	Expected	280.0	50.0	330.0

Table 13 Computing for the X^2 obtained value

CELL	F_o	F_e	$F_o - F_e$	$(F_o - F_e)^2$	$(F_o - F_e)^2/F_e$
A	17	17.0	0	0	0
B	207	196.8	10.2	104.04	0.53
C	39	47.5	-8.5	72.25	1.85
D	17	18.7	-1.7	2.89	0.15
E	3	3.0	0	0	0
F	25	35.2	-10.2	104.04	2.96
G	17	8.5	8.5	72.25	8.5
H	5	3.3	1.7	2.89	0.88
TOTAL	330	330	0	358.36	X^2 Obtained: 14.87

NB: F_o – Observed frequency F_e - Expected frequency X^2 Obtained = 14.87

STEP FIVE (Making a decision)

After computing for the test statistics, we find that the X^2 – critical value was 7.82 while the X^2 obtained was 14.87. This means that the X^2 – critical is less than the X^2 obtained value.

We therefore reject the null hypothesis according to the decision making rule stated. This means there is enough grounds to say that institutions with a policy are more likely to implement HIV programs than institutions without a policy. In other words, there is a significant relationship between availability of workplace HIV policy and implementation of HIV programs for workers.