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**NON-COMPLIANCE AND FACTORS ASSOCIATED WITH HIV/AIDS MANAGEMENT IN BONO REGIONAL HOSPITAL AMONG HEALTHCARE PRACTITIONERS: COMPARING GHS STANDARD MANAGEMENT WITH ACTUAL PRACTICE**

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# ABSTRACT

**Introduction:** HIV/AIDS management continues to be a major public health challenge despite many international and local interventions. This study will seek to assess non-compliance and factors associated with HIV/AIDS management in Bono Regional hospital among healthcare practitioners: comparing GHS standard management with actual practice.

**Methodology:** A cross-sectional descriptive study design was employed among healthcare practitioners. Data were collected using structured questionnaires and analyzed using SPSS Analytical Software version 26. Descriptive statistics summarized knowledge and practice levels, while chi-square tests determined associations between sociodemographic variables and compliance outcomes.

**Results:** The majority of healthcare practitioners had not received any form of formal training on HIV/AIDS management, however, they exhibited a moderate knowledge and high compliance to GHS management guidelines. Gender and religious affiliation were found to be significantly associated with knowledge levels, while no sociodemographic or professional characteristic was found to be associated with practice levels.

**Conclusion:** Despite limited formal training, healthcare practitioners demonstrated high compliance to HIV/AIDS management guidelines and moderate knowledge levels. It is recommended that structured and regular formal training programs be institutionalized to strengthen healthcare practitioners’ knowledge base.

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# LIST OF ABBREVIATIONS

HIV Human Immunodeficiency Virus

AIDS Acquired Immune Deficiency Syndrome

STI Sexually-Transmitted Infection

STD Sexually-Transmitted Disease

GHS Ghana Health Service

SSA Sub-Saharan Africa

ART Anti-Retroviral Treatment

NACP National AIDS Control Programme

PLHIV People Living with HIV

ALHIV Adolescents Living with HIV

PrEP Pre-Exposure Prophylaxis

PEP Post-Exposure Prophylaxis

RTA Road Traffic Accident

AZT Zidovudine

LPV/r Liponavir/Ritonavir

HBV Hepatitis B Virus

HCV Hepatitis C Virus

WHO World Health Organization

GAC Ghana AIDS Commission

GIPA Greater Involvement of People Living with AIDS

UNAIDS Joint United Nations Program on HIV/AIDS

OPD Out-Patient Department

SPSS Statistical Package for Social Sciences

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

Despite significant worldwide and local measures to combat the pandemic, the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) remain global health tragedy (Govender, 2021). The oldest viruses known as retroviruses, may infect practically all vertebrates worldwide and cause serious illnesses like cancer, neurological problems, and immune deficiencies (Khan, 2021). A wide variety of mammals are infected by viruses from the Lentiviridae family. These viruses induce the development of some neurological and immunological conditions, the most well-known of which is the acquired immunodeficiency syndrome (AIDS) brought on by HIV-1 which has become one of the most significant threats to public health today among the member of the lentivirus family (Ruggiero & Richter, 2020). Human immunodeficiency virus (HIV) types HIV-1 and HIV-2 are responsible for acquired immunodeficiency in humans Compared to HIV-1, HIV-2 has lower pathogenicity, a shorter illness progression, and a much higher number of disease controllers. HIV-2 infection causes a substantially slower decline in CD4+ T cells than HIV-1 infection (Ponnan et al., 2021).

According to the information available, about 25.7 million persons in Africa are HIV-1 infected, which also represents nearly two-thirds of all new HIV-1 infections worldwide (Giovanetti, Ciccozzi, Parolin, & Borsetti, 2020). About 1.5 million new HIV-1 infections were diagnosed in Africa in 2020, although the AIDS pandemic differs significantly from northern to southern African states. Given that their inhabitants often participate in less high-risk cultural practices that encourage viral propagation, Northern Africa has noticeably lower prevalence rates (Giovanetti et al., 2020). Due to the occurrence of severe opportunistic infections in those with advanced immunosuppression, a clear susceptibility to bacterial sepsis and tuberculosis at every stage of HIV infection, and a rising prevalence of comorbid conditions, therefore HIV-infected patients are at high risk for critical illness (Barbier et al., 2020). The high prevalence of HIV in sub-Saharan Africa has been attributed to several factors, such as a history of transactional or paid sex, concurrent sexual partnerships, co-infection with viral and bacterial STIs, particularly type 2 herpes simplex virus, inconsistent or nonexistent condom use, and a lack of male circumcision among men (Nabukenya, 2020).

Patients who have been diagnosed with HIV infection, routine HIV testing has been linked to several extremely beneficial outcomes, such as decreased late detection, decreased HIV-related death, and decreased all-cause mortality (Chen, 2022). Expanding regular HIV testing in well-targeted settings under universal health care may enhance clinical outcomes for persons living with HIV as well as the control of the HIV pandemic for society (Chen, 2022). Participation of those with HIV or at risk for HIV has been an important role in the lowering of HIV infection. Increased accessibility to and availability of HIV diagnostics, such as high-throughput laboratory-based technology, point-of-care tests, and over-the-counter test kits; implementation of routine HIV screening and antiretroviral therapy regardless of immune status or disease stage; and programmatic efforts to increase linkage to care and re-engagement in treatment are likely to have contributed to reductions in incidence between 1981 and 2019. Programs for treatment, behaviour modification, pre and post-exposure prophylaxis, and care (Mermin, 2021). HIV/AIDS management is an important topic of public health. The position entails determining the characteristics and logistics needed to establish the existence of HIV/AIDS as well as how the illness is discovered. One of the main tasks performed by public health professionals is counselling. Individuals with the condition are put on counselling schedules so they can follow the treatment instructions and report any new difficulties to doctors for treatment. Again, there is a significant role for public health to play in the care and treatment of those with HIV/AIDS. This role includes referrals and reviews, which are essential public health activities. This study seeks to assess non-compliance and factors associated with HIV/AIDS management in Bono Regional hospital among healthcare practitioners; comparing GHS standard management with actual practice.

## 1.2 Problem Statement

Although significant progress has been made in terms of prevention and treatment of HIV/AIDS since the early 1980s discovery of HIV, nearly 38 million people worldwide still have the disease (Ruggiero, 2020). Of those infected, more than half are receiving antiretroviral therapy (ART), a cocktail of three or more antiretroviral medications that slow the spread of the virus and the corresponding disease (Ruggiero & Richter, 2020). It is found that 70 million people have contracted HIV/AIDS worldwide since its discovery, of whom 35 million have passed away (Nahand et al., 2020). Globally, 36.9 million individuals were HIV positive as of the end of 2017 which has led to chronic untreated HIV illness characterized by inflammation and immune system dysfunction (Nahand et al., 2020).

In 2019, there were 36.9 million cases of HIV/AIDS worldwide, or 0.5% of the world's population, with a prevalence rate of 476 cases per 100,000 people (Govender et al., 2021). Furthermore, an estimated 17.2 million HIV-positive people are not receiving ART and only 44% of individuals receiving ART achieve viral suppression (Govender et al., 2021). Even though Sub-Saharan Africa only has 2% of the world's population, it bears a disproportionately large share of the burden of HIV infection, leading to higher rates of morbidity and mortality from HIV/AIDS (Giovanetti et al., 2020; Govender et al., 2021). In Sub-Saharan Africa, where gender-based violence and inequalities continue to fuel the pandemic, continues to be the region with the highest prevalence of HIV AIDS, accounting for an estimated 69 per cent of all people living with the disease despite a 23 per cent decline in new HIV-1 infections since 2010 (Giovanetti et al., 2020). In addition, Sub-Saharan Africa (SSA), which is home to around 70% of all HIV-positive persons worldwide, has the greatest prevalence of the virus. Antiretroviral treatment (ART) was developed, yet HIV/Acquired Immune Deficiency Syndrome (AIDS) is still one of the major causes of mortality (Solomon, Furuya-kanamori, & Wangdi, 2021). Due to the occurrence of severe opportunistic infections in people with advanced immunosuppression, a clear susceptibility to bacterial sepsis and tuberculosis at every stage of HIV infection, and a rising prevalence of comorbid conditions, HIV-infected patients are at high risk for critical illness. Making public health authorities continue to face several difficulties while providing care for patients who are HIV positive (Barbier et al., 2020).

It is known that, 334,713 people in Ghana were HIV/AIDS positive, with 65% of them being female and 35% being male (Owusu, 2020). Estimates of newly infected individuals were 19,931, while AIDS-related fatalities overall totaled 14,181 (NACP, 2019). In Bono Regional Hospital, 219 new cases of HIV were reported in 2020. In 2021 the number of new cases of HIV increased from 219 to 274. This has resulted in increased admissions and bed occupancy at the facility. Additionally, in Bono regional hospital, there is no standard operational protocol for the management of HIV/AIDS. As a results, most clinicians encounter difficulties in providing HIV/AIDS management to patients. This study will seek to assess whether care providers at the Bono Regional hospital are following the standard GHS management of HIV/AIDS at the facility.

## 1.4 Justification of the Study

Reducing HIV/AIDS is one of the goals of the sustainable development goal three. This goal is targeted to end the pandemic of HIV/AIDS by 2030 (WHO, 2020). This study will contribute in the achievement of this goal if the number of new HIV infections and AIDS-related deaths decline, and protocol for the management and treatment of HIV/AIDS is improved. Conducting this study will help bridge the gap (knowledge gap) in the literature that exists on HIV/AIDS management in Bono Regional Hospital in the prevention of HIV/AIDS infection. Again, Bono Regional hospital is a referral center which receives cases from all the peripheral clinics and health centers and when the study is conducted in this facility, the results will reflect what is happening in the peripheral clinics and health centers. This will improve the efficiency of health delivery to patients cross the region, hence providing economic development aside adding to existing body of knowledge where other researchers can use the findings to establish concrete evidence on the risk factors, treatment, counselling and prevention of HIV/AIDS. More so to date no study has been conducted at the facility to assess non-compliance and factors associated with HIV/AIDS management in Bono Regional hospital among healthcare practitioners; comparing GHS standard management with actual practice.

## 1.5 Study Objectives

### 1.5.1 General Objective

The general objective of the study is to assess the non-compliance and factors associated with HIV/AIDS management in Bono Regional Hospital among healthcare practitioners, comparing the GHS standard management guidelines with actual practice.

### 1.5.2 Specific Objectives

1. To assess the knowledge of healthcare practitioners on GHS standard management for HIV/AIDS
2. To assess the practices of healthcare practitioners on GHS standard management for HIV/AIDS
3. To determine the factors associated with knowledge of healthcare professionals on GHS standard management for HIV/AIDS
4. To determine the factors associated with practices of healthcare professionals on GHS standard management for HIV/AIDS.

## 1.6 Research Questions

1. What do healthcare practitioners know about the GHS Standard Management for HIV/AIDS?
2. What are the practices of healthcare practitioners on HIV/AIDS management?
3. What are the factors associated with knowledge of healthcare professionals on the GHS Standard Management for HIV/AIDS?
4. What are the factors associated with practices of healthcare professionals on GHS Standard Management for HIV/AIDS.

## 1.7 Significance of the Study

Public health management of HIV/AIDS is very essential to determine how functional and effective counselling and treatment methods can prevent the further spread of the disease. The findings of this study address the non-compliance and factors associated with HIV/AIDS management in Bono Regional hospital among healthcare practitioners. The study identified

whether or not healthcare practitioners in Bono Regional Hospital are following the GHS standard management of HIV/AIDS and also challenges healthcare providers encounter during the management of HIV/AIDS. It will also enhance the capacity of the health professionals to improve the counselling methods, treatment options and review methods available in the management of HIV/AIDS. Policymakers will have first-hand information on the strategies used which are not helping to improve the management of HIV/AIDS, renew the policy on HIV/AIDS/STI management so that improved strategies can be adopted to mitigate the challenges. It will also foster concrete decision-making on how HIV/AIDS can be managed through public health strategies. Lastly, it will add to the existing literature of knowledge and also address the gap that exists in order kinds of literature in academia.

# CHAPTER TWO

# 2.0 LITERATURE REVIEW

## 2.1 Introduction

Chapter Two of the study presented how literature was searched and reviewed following the study objectives. The chapter presented HIV policy in Ghana and the delivery of health services in the country. In addition, empirical findings were reviewed from Google Scholar, PUBMED (Medline), Web of Science, Semantic Scholar, Conference abstracts and HIV/AIDS-related documents. Empirical literature was searched with the help of Boolean operators such as “AND”, “NOT” and “OR”.

## 2.2 Conceptual Framework for HIV/AIDS Management

The conceptual framework was adopted from the Hong Kong Model of HIV/AIDS Management, 2005. This is depicted in Figure 1. The establishment of science-based protocols, a commitment to continuous professional development, community involvement in resource mobilization and care delivery, and integration with clinical activities and professional development in the fields of infectious disease, immunology, dermatology, STD treatment, and infection control are the defining characteristics of the Hong Kong Model. In this setting, the three categories of activities—medical intervention, health maintenance, and self-help and community support—are carried out in that order. The execution of the actions contained within this framework is the responsibility of a group that includes medical professionals, nurses, and social workers.

Medical intervention refers to a variety of clinical activities designed to central symptoms and diseases arising from HIV infection and to maximize their occurrence through the adoption of appropriate therapeutic measures targeting the virus of the immune system. The monitoring of immunologic, virologic, and physical evaluation are all included in these measurements. In addition, there is the prevention and management of opportunistic infections and neoplasm, and finally, there are the HAART activities that are delivered by trained physicians who have experience in HIV/AIDS management. Through consultations and referrals, there is an exchange of expertise in HIV medication and other medical specialties.

The term "health maintenance" refers to a collection of actions that are planned out to improve the health of HIV-positive persons and the families they live with. Patients and their families can receive counselling from nurses who have specific training in HIV care when they are on HAART treatment. There are specialized programs that are run to encourage people to stick to the complicated regimens. When it comes to assisting patients and their families, the nursing staff collaborates closely with the social worker. In addition to this, it is connected to services that test for HIV.

Activities such as self-help and community support are activities that are coordinated by social workers to assist each client in leading a normal life. The activation of community resources and the formation of support groups are the means through which this is accomplished. At the moment, individuals who are currently living with HIV or AIDS are actively participating in the networking process. This is done through organizing events in collaboration with other government organizations to maintain a support network for people who are now living with HIV infection.

Figure 1: The Hong Kong Model of HIV/AIDS Management. Source: Hong Kong HIV/AIDS Management Guidelines, 2005

Medical Team

Nursing Team

Social Worker Team

Medical intervention

Medical assessment

HAART

Self-help and community support

Mobilization of community resources

Support group

Health maintenance

Counselling

Family support

Adherence program

Referrals

Consultation

HIV Testing

NGO

Community network

## 2.3 Knowledge of Healthcare Practitioners on Standard Management of HIV/AIDS

The management of HIV/AIDS has evolved over the years with variations aimed at providing the best possible care for people living with HIV/AIDS (PLHIV). Consequently, healthcare workers are tasked with keeping up-to-date with the current knowledge regarding methods of prevention and management of HIV/AIDS (Yadzir, Ramly, & Suleiman, 2021). Globally, although significant progress has been achieved in the treatment and care of PLHIV, there is still reports of HIV-related discrimination and stigma from healthcare workers, as well as the general population (Yadzir et al., 2021). Healthcare workers are integral in the global efforts aimed at ending the HIV/AIDS endemic, and are as such encouraged to provide support, encouragement and counselling to PLHIV. Knowledge of this integral management practice should deter healthcare workers from being discriminatory towards PLHIV. However, Pitasi et al. (2018) has established that knowledge on HIV/AIDS management protocols does not necessarily translate to positive practices by healthcare workers. Another integral aspect of management of HIV/AIDS pertains to adolescents who are diagnosed with the infection. According to Hayfron-Benjamin et al. (2020), there is an inadequate number of healthcare workers who possess the requisite knowledge to provide age-specific HIV/AIDS counselling and its related services to adolescents living with HIV/AIDS (ALHIV). To compound this challenge, the few healthcare workers who claim to be knowledgeable about management of HIV/AIDS among adolescents have been found to be deficient in their knowledge (Hayfron-Benjamin et al., 2020).

Management of HIV/AIDS can be categorized in terms of managing PLHIV (including ALHIV), pre-exposure prophylaxis (PrEP) and post exposure prophylaxis (PEP) (Celuppi et al., 2022; Mathewos et al., 2013; Ross et al., 2017). In their study to assess the knowledge towards PEP among healthcare workers in Ethiopia, Mathewos et al. (2013) identified healthcare workers to possess adequate knowledge. PEP is a requirement in order to prevent pathogenic transmission after healthcare workers are exposed to PLHIV. The management protocols in this instance pertain to such things as first aid, risk assessment, counselling, medicating short-term antiretroviral drugs for a period of 28 days after relevant laboratory investigations are conducted, and subsequent evaluation after the medication regimen is completed (Sharma et al., 2007). In a Nigerian study conducted among healthcare workers in a tertiary hospital, participants were identified to possess inadequate knowledge about PEP (Owolabi et al, 2012). According to the findings of the study, although most of the healthcare workers had heard about PEP, they did not have knowledge of which antiretroviral medications were utilized in the management regimen (Owolabi et al., 2012). These studies clearly indicate a knowledge gap among healthcare workers regarding PEP. Poor knowledge on PEP has also been reported in an Ethiopian study where healthcare workers were reported not to utilize the treatment regimen because they had no knowledge about it (Tebeje & Hailu, 2010). Similar to the findings of Owolabi et al. (2012), a study conducted among doctors in London identified that less than a quarter of them are able to adequately identify the medications utilized for the PEP regimen at the time (Khan et al., 2002).

Pre-exposure prophylaxis has been documented as a highly effective means of preventing HIV/AIDS. According to Bunting et al. (2021) when taken daily, the PrEP regimen has a 99% potency of reducing the risk of sexual transmission of HIV. To corroborate this, a clinical trial conducted among men who have sex with other men reported up to 90% reduction in HIV acquisition among men who were put on a specific PrEP regimen (Anderson et al., 2012). Notwithstanding, the efficacy of these medications as established by these studies have not adequately met the public health needs required for the prevention of HIV/AIDS. This challenge has been attributed to poor and limited knowledge of healthcare workers about PrEP (Bunting et al., 2021). In a survey conducted in the United States among primary care clinicians over the period from 2009 to 2015, prescribers were identified to be unfamiliar with the guidelines pertaining to PrEP and the specific requirements patients need (Smith et al., 2016). According to Smith et al. (2016), men who have sex with other men, and bisexuals are more likely to ignore opportunities to prevent HIV due to verbal harassment, physical and sexual violence, and associated stigma they experience from the general public and some healthcare professionals. Consequently, the prevalence of HIV is noted to be higher among this population group. Members of this population have reported been denied PrEP treatments because of such related stigma, and because healthcare workers have reported their limited knowledge on the specific medications to prescribe for PrEP (Furkawa et al., 2020). In addition to these health worker-related challenges, Bunting et al. (2021) identified some lapses in knowledge, including but not limited to follow-up HIV testing at 3-month intervals, and the need for HIV-negative status to be considered as a candidate for PrEP.

In a study conducted in Malaysia among healthcare workers in government healthcare facilities, respondents were found to possess high levels of knowledge pertaining to HIV (Yadzir et al., 2021). Similarly, a study conducted in the Kingdom of Lesotho identified high levels of knowledge and understanding among healthcare workers and end-users, especially pertaining to pre-exposure prophylaxis management (Geldsetzer et al., 2022). The finding of this study was attributed to the government’s intervention in providing a nationwide training for healthcare workers on the management of HIV (Geldsetzer et al., 2022). Among students pursuing healthcare professions in the United States, although awareness of management requirements was high, there was limited knowledge pertaining to the specific regimen required for the management of HIV (Przybyla, et al., 2021). This can be due to the fact that healthcare students are exposed to several disease conditions and would require to advance in their studies to discover the specific management protocols.

## 2.4 Practices of Healthcare Practitioners on Standard Management of HIV/AIDS

Practices associated with management of HIV/AIDS is diverse across multiple geographical locations (Celuppi et al., 2022). This is due to several factors such as availability of antiretroviral medications and other required resources for management, country-specific policies, and management awareness among healthcare workers, among others (Mathewos et al., 2013; Ross et al., 2017). In locations where PLHIV perceive negative practices of HIV/AIDS management by healthcare workers, there is bound to be low utilization of HIV/AIDS care services, low uptake of antiretroviral therapy, and consequently, poor treatment/management outcomes (Yadzir et al., 2021). Practices of healthcare practitioners pertaining to HIV/AIDS management can be considered in terms of the criteria of management being meted out, whether to PLHIV, and administering PrEP or PEP. Ordinarily, adequate knowledge on the management of HIV/AIDS should translate into positive practices, however, this has been established to be at variance most of the time (Pitasi et al., 2018).

PEP management is often discussed among healthcare workers, because they are most exposed to HIV infection in the healthcare setting. However, any unsuspecting individual is susceptible to contract the infection, and may require PEP. Incidentally, this may become necessary in the event of a road traffic accident (RTA) where blood exposure is inevitable. The National AIDS Control Program (NACP) in Ghana has specified protocols to follow in the PEP services, which include washing the exposed body part with soap and water, reporting the exposure incident and source of infection, the exposed individual being counselled, assessing the risk of the infection, requesting for and obtaining informed consent and consequently testing for the HIV infection, and being placed on an antiretroviral regimen for a period of 28 days (NACP, 2014). In risk assessment after the report has been made, the individual is either categorized as being at very low risk, low-risk or high-risk. An individual is said to be at high-risk if they were exposed from a sharp instrument such as a needle prick, exposure to large volumes of blood, the source of the exposure is unknown, the source of the exposure is a symptomatic HIV-positive patient, and when the injury is deep (Babanawo et al., 2018). For such individuals the recommended drug regimen in Zidovudine (AZT) 300mg, Lamivudine (3TC), 150mg and Lopinavir/Ritonavir (LPV/r) 400mg, taken twice daily for the 28-day period (Mathewos et al., 2013). On the other hand, a low-risk exposure is classified as being exposed to a small volume of blood, samples of other body fluids aside blood, the source of the exposure is an asymptomatic HIV-positive patient, and exposure from a superficial injury or exposure to mucous membrane (Babanawo et al., 2018). For low-risk individuals, the recommended drug regimen is AZT 300mg and 3TC 150mg to be taken twice daily for the 28-day period (Mathewos et al., 2013). Individuals who are classified as very low-risk are not required to begin any PEP regimen (Babanawo et al., 2018).

In a study conducted among health workers in Lagos University Teaching Hospital, low level of practice of post-exposure prophylaxis was identified among the participants, although they indicated predominant occurrences of needle pricks (Ajibola et al., 2014). Similarly, Eticha and Gemeda (2019) in their study among healthcare workers in Eastern Ethiopia, the high knowledge identified among them was not commensurate with their practices. Consequently, the researchers suggested the need for formal trainings to be conducted for the healthcare workers to encourage their practice in accordance with their levels of knowledge. This challenge is common among healthcare workers due to their constant exposure to blood and other bodily fluids which exposure them high-risk HIV infection (Eticha & Gemeda, 2019).

In an Iranian study, poor practices were identified among healthcare workers pertaining to management of HIV among PLHIV (Ebrahimi, Sindarreh, & Nasirian, 2020). The study reported poor practices pertaining to healthcare workers’ unwillingness to provide care for HIV-positive men who sleep with other men, and laboratory staffs’ unwillingness to run diagnostic tests for this population group (Ebrahimi et al., 2020). Other studies have reported negative practices including denying care to HIV-positive individuals, placing HIV-positive individuals at the end of hospital queues, providing lower standards of care, revealing patients’ HIV status to relatives and other healthcare workers without their consent, and gossiping about PLHIV, among others (Yadzir et al., 2021). It is noteworthy that the practices of healthcare workers impact significantly on the management and prevention of HIV, especially among PLHIV. Consequently, the gradual increase in HIV prevalence regardless of the high levels of knowledge that have been recorded in some studies require that healthcare workers exhibit positive attitudes towards HIV management (Ebrahimi et al., 2020).

It has been documented that many healthcare workers in sub-Saharan Africa do not communicate appropriately with PLHIV in providing care. A study that was conducted in Nigeria to evaluate practices of nurses towards HIV-positive individuals identified that they are harsh and speak rudely to PLHIV (Reis et al., 2005). In Ghana, nurses are known to exhibit discriminatory care towards people they are familiar with, whilst neglecting to give prompt attention to PLHIV (Dapaah, 2016). Healthcare workers with high levels of education have been documented to relegate individuals with lower educational status as being inferior, consequently ordering them about, yelling at them, and treating them with impatience during their hospital visits (Dapaah, 2016). It is imperative for healthcare workers to display unstigmatized practices towards PLHIV in order to offer the best management and care (Ebrahimi et al., 2020).

## 2.5 Factors that Influence Knowledge of Healthcare Practitioners on HIV/AIDS Management

As healthcare workers, occupational duties typically expose them to blood and other bodily fluids, that increase their risk of exposure to HIV, as well as other viral health infections as Hepatitis B virus (HBV) and Hepatitis C virus (HCV) (Eticha & Gemeda, 2019). Invariably, at every screening of HIV in healthcare facilities, HBV and HCV are included in the routine screening. The WHO guidelines in the use of antiretroviral drugs for treating and preventing HIV infection in PEP is recommended to be initiated as soon as possible, up to 72 hours after an individual is identified to be at high-risk exposure (WHO, 2014). However, not all healthcare practitioners are privy to this knowledge. According to Eticha and Gemeda (2019), being of higher educational qualification and/or having a qualification in the healthcare sector such as medicine significantly influences knowledge of management protocols of HIV/AIDS. Similary, Owolabi et al. (2012) reported from the findings of their study that being a doctor, a laboratory scientist or a nurse is significantly associated with knowledge on PEP management. According to their study, doctors were more likely to possess higher knowledge compared to laboratory scientists and nurses respectively. Possibly, doctors establish the diagnosis of the infection whereas laboratory scientists carry out the diagnostic investigation to confirm the diagnosis, influencing their level of knowledge (Owolabi et al., 2012). Among students of pharmacy in a study conducted in Malaysia, however, knowledge on PEP was identified to be low (Ahmed, Hassali, & Aziz, 2009).

Another factor known to influence healthcare workers’ knowledge on management of HIV/AIDS is the number of years of work experience they possess. Based on their experience and frequency of attending to the same cases over and over, it is easier identifying and initiating prompt management. Owolabi et al. (2012) established that the efficiency and efficacy of the management of HIV/AIDS, especially among individuals who are categorized as high-risk exposed, is time-dependent, indicating the need for early initiation of the treatment regimen. This is knowledge most likely possessed by healthcare practitioners with multiple years of work experience. In their study in North West Ethiopia, Mathewos et al. (2013) identified low levels of knowledge among healthcare workers due to the fact that majority of them had been working for less than six months up to two years. Another knowledge likely to be possessed by healthcare workers with multiple years of work experience is that fact that, in addition to being on the prophylactic treatment for the 28-day duration, the regimen should be started within an hour to 72 hours of being considered high-risk exposed. Consequently, interns at a medical college in West Bengal, India, were identified to have poor knowledge this (Mukherjee et al., 2013). Among healthcare workers in Eastern Ethiopia, Eticha and Gemeda (2019) reported high knowledge of the PEP management protocols because more than half of them had been working for longer as professional healthcare practitioners.

Providing healthcare workers with training on the management and organizing multiple workshops to that effect influences their knowledge on HIV/AIDS management. Based on their findings, Mukherjee et al. (2013) suggested the need for on-site training for medical school interns on HIV/AIDS management, which can be extended as a recommendation for professional medical doctors and other healthcare workers engaged in the disease management. To corroborate this, Matthewos et al. (2013) identified that most healthcare workers received knowledge on standard management of HIV/AIDS from formal training workshops. A study conducted in Nigeria to advocate for healthcare workers’ training argued that it is imperative due to existing co-morbid conditions present among PLHIV, which may render the impact of the HIV management insignificant (Oladele et al., 2023).

## 2.6 Factors that Influence Practices of Healthcare Practitioners on HIV/AIDS Management

It is noteworthy that adherence to the precautionary guidelines recommended by the WHO and adapted by the health service agencies of various countries for the prevention and treatment of HIV/AIDS is vital to curb this public health menace. Both individuals who are exposed and those infected are required to ensure strict adherence to the treatment/management protocols for effective control and prevention of the infection (Eticha & Gemeda, 2019). Some poor practices that have been identified to be associated with HIV/AIDS management by healthcare practitioners include, but not limited to refusal to utilize personal protective equipment (PPE) including gloves, poor handling and disposal of needles and sharps and refusal to practice regular hand washing with soap under running water (Mukherjee et al., 2013). In a study conducted among healthcare workers in India to assess the determinants of non-compliance to precautionary measures required universally of healthcare practitioners, respondents were said to have refrained from using PPE because of the perception of offence by patients, discomfort with use, time-consuming to use, and because colleague healthcare practitioners refrained from usage (Kotwal & Taneja, 2010). Similarly, Mukherjee et al. (2013) reported from their findings that respondents indicated such excuses as impracticability with regular hand washing, clumsiness in handling needles while in gloves, and feeling uncomfortable while donning PPE.

Poor practices in relation to HIV/AIDS management have been identified to be as a result of low levels of knowledge among healthcare professionals pertaining to specific aspects of the management protocol (Yadzir et al., 2021). In their study, Yadzir et al. (2021) identified that healthcare workers donned PPE while attending to PLHIV for fear of contracting the infection. However, this is contrary to the rationale of universal precautionary measures, because, PPE do not only protect the healthcare worker, but the patient as well, as the spread of infection can be from either party. Positive attitudes towards PLHIV has been attributed to healthcare workers’ willingness to mete out health needs to infected individuals and their general sense of compassion (Quach et al., 2005). Such positive attitudes include, but not limited to providing warm reception, showing courtesy, providing financial support, offering advice, and providing a comfortable atmosphere for interactions (Dapaah, 2016). According to Ebrahimi et al. (2020), healthcare workers in Iran refrain from meting out treatment to PLHIV because some of the means by which the infection was contracted, including extramarital affairs and homosexuality are practices heavily frowned on by the Islamic religion. Thus, religious beliefs influence health workers’ practices of HIV/AIDS management. Similarly, healthcare practitioners who belong to the Judeo-Christian worldview have been noted to stigmatize PLHIV because they frown upon sexual relations outside of marriage and among individuals of the same sex (Scott et al., 2021). These practices exhibited by healthcare professionals can be attributed to the fact that they possess inadequate knowledge on the several routes of transmission of the HIV infection.

According to Zarei et al. (2015), healthcare workers’ belief that HIV infection is as a result of unorthodox behavior frowned upon by society, and fear of contracting the infection from PLHIV impact negatively their practices towards them in terms of meting out their management protocols. Thus, inadequate knowledge on the routes of transmission of the infection influences healthcare workers’ practices towards PLHIV. In a study that assessed healthcare worker-related discriminatory attitudes and practices exhibited by healthcare practitioners in Bangladesh, respondents were identified to possess irrational fear (Hossain & Susan, 2010). Further, the researchers identified that being of the male gender, working in an educational healthcare center, working in a medical diagnostic center, and being of low educational level influence practices towards management of HIV/AIDS and PLHIV.

## 2.7 HIV/AIDS and STI Policy in Ghana

Since 1987, Ghana has been consistent in the design and execution of national solutions toward the decrease of the incidence and prevalence of HIV/AIDS, as well as mitigating the effects on the population. These measures have been aimed at mitigating the effects of HIV/AIDS. Following Act 613 (2002), the Ghana AIDS Commission (GAC) was founded to function as a policy direction that serves to give policy direction and guarantee coordinated and multi-sectoral responses to the fight against and management of HIV/AIDS. The national HIV/AIDS strategy intended to offer universal access to HIV prevention, treatment, and care services with the ultimate goal of eliminating AIDS as a hazard to public health. The national policy for HIV/AIDS enables the development and execution of a national response that reflects on global paradigms while simultaneously addressing the local context in which it will be implemented. This is an important aspect of the policy. The policy acknowledges HIV/AIDS as a development problem, and it has been adequately and particularly incorporated into the global development agenda, which is comprised of Sustainable development goals (SDGs). Greater Involvement of People Living with HIV (GIPA) outlines the concepts that serve as the basis for this policy, and these values serve as the policy's guiding light. The policy of UNAIDS is to achieve the rights and duties of people living with HIV, including their right to self-determination and involvement in the decision-making process that affects their life, among other rights and obligations. In addition, the strategy has been harmonised with global principles and frameworks to maximise the effectiveness of the combined efforts of the international community to combat HIV/AIDS.

Furthermore, the policy acknowledges that HIV has health, socioeconomic, and developmental impact on the Ghanaian population. As a result, multi-sector and multi-disciplinary interventions are vital to the program's implementation to ensure maximum efficacy and efficiency. Additionally, the policy ensures engagement and collaboration with public, commercial, local, and international organisations, since the government accepts the reality that it cannot solve the difficulties and the repercussions of HIV/AIDS in Ghana all by itself. The policy has a vision of Ghana as a country in which HIV and AIDS have been eradicated, and its purpose is to create an environment that is conducive to the execution of effective HIV and AIDS interventions, as well as to achieve epidemic control. By providing the people with knowledge that is supported by evidence on HIV and AIDS, the objectives of the study, about the strategies put up to achieve them, aim to empower the population to take preventative measures against new HIV infections. A further objective of the policy is to ensure the availability of and accessibility to prevention, treatment, care, and support services based on equity, the principles of the WHO treatment policy, and the fast-track commitment to end HIV/AIDS by 2030. This objective will be accomplished by ensuring increased involvement of youth and especially males in sexual and reproductive health education and programmes, as well as sustained access of key populations to integrated services.

This may be accomplished by bolstering the health care delivery system, offering comprehensive, differentiated, and integrated HIV services, and encouraging the formation of HIV programmes in the workplace in both public and private organizations. In addition, the third goal is to lessen the negative social and economic impacts that HIV has on those who are infected with it and living with it. People who are at risk of, affected by, and living with this condition are the target audience for the desired outcome of this purpose. HIV can live a life free from the stigma, discrimination, and economic hardships that are caused by HIV as a result of the promotion of the human rights of all persons affected and living with HIV, the creation of an environment that is supportive and protective of legal and legislative environments, and the provision of social protection to persons who are affected by or living with HIV.

A proportional increase in domestic funding towards the execution of the policy and increasing domestic financing for HIV activities as well as increasing external funding for HIV activities is the desired outcome of the fourth objective of the policy, which is to ensure the availability of adequate funding to execute the policy strategies. This objective has the desired outcome of ensuring the availability of adequate funding to execute the policy strategies. The execution of the HIV/AIDS policy vision aims and goals to achieve its intended objective through its strategies is the responsibility of the ministries, Departments, and Agencies that fall under the majority of the ministries in the country. Some of these ministries include the Ministry of Health, Ministry of Education, Ministry of Local government, and Ministry of Finance. In conclusion, the HIV/AIDS policy has a very good policy vision and key strategies that could help achieve the policy aim in the absence of significant national challenges such as the outbreak of an epidemic, thereby sustaining the life and promoting the longevity of HIV infected population while simultaneously reducing the risk of infection among the sexually active population in the country. In addition, the policy has key strategies that could help achieve the policy goal in the absence of significant national challenges such as the outbreak of an epidemic.

## 2.8 Summary and Conclusion

A review of the relevant literature was carried out using empirical research. A careful review of the literature showed that research on the public health management of HIV/AIDS patients was inadequate. As a result, the purpose of this study was to attempt to address this vacuum that existed in the existing body of information.

# CHAPTER THREE

# 3.0 METHODOLOGY

## 3.1 Introduction

Chapter Three of the study presents the methods that were in conducting the study. The chapter covers the study area/ area, study type and design, study population and sample size. It also elaborated on the study data collection procedure, data analysis and the ethical considerations of the study.

## 3.2 Study Site/Area

The study was conducted in the Bono Regional Hospital, Sunyani. The facility runs 24-hour services. The facility has a total staff strength of 1184 which comprises both clinical and non-clinical staff. The hospital has several departments ranging from female and male surgical wards: which admit patients who need surgical intervention and patients after surgery. Female and male medical ward: where males and females are provided admission for medical intervention. There is also an accident and emergency ward which Detain patients who need immediate care. Allied ward for admission of patients who need an eye, dental, ear nose and throat condition. Children ward for admission of children from 3 months to 12 years. Pediatric and emergency ward for admission of children 3 months and above who need immediate care.

Private ward for admission of a patient who is stable but needs further monitoring. Admission of patients with infectious diseases such as PTB and COVID-19 and HIV. Theatre recovery ward for preparing the patient for surgery and monitoring the patient after surgery for a while before trans-out. Intensive care unit for admission of a critically ill patient. Among others such as Administration, Psychiatric Ward, Orthopedic Ward, Gynecological Ward, Mother And Baby Unit, Labour Ward, ENT, Eye, Dental, OPD, Neonatal Intensive Unit, Morgue, Public Health Unit, and Laboratory Units.

The regional hospital was selected as the study site because it is a referral centre that treats and manages all referral cases of both complicated and uncomplicated HIV/AIDS diseases, therefore providing public health management to both direct and referred cases of HIV/AIDS patients.

## 3.3 Study Design

The study employed a descriptive design. A quantitative research approach was employed. In the quantitative approach, a cross-sectional study was conducted on the identified population, made up of general clinical staff. A well-structured questionnaire was used to gather data from respondents until the required sample size was obtained.

## 3.4 Study Population

The study population was made up of healthcare providers (Doctors, Physician Assistants, Nurses, Laboratory Scientists, etc.) rendering services to HIV/AIDS patients at the OPD, ART, wards and Emergency unit at the regional hospital. Healthcare providers who render care at the Bono Regional Hospital include Specialists (20), Medical Officers (37), House Officers (58), Physician Assistants (8), Nursing Officers and Specialists (152), Registered General Nurses (151), Midwives (243), Community Health Nurses (18), and Enrolled Nurses (145).

### 3.4.1 Inclusion Criteria

The study included clinical healthcare providers at the facility. This is because all health staff that provide clinical care are required to be informed about the public health management of HIV/AIDS at the facility. In addition to this, they are the right participants to provide a clear and detailed response to the questionnaire since they will have been exposed to handling HIV/AIDS-related causes or conditions for a while at the hospital and elsewhere as health care providers.

### 3.4.2 Exclusion Criteria

The study excluded health care providers who qualified to be included in the study but were on annual leave for more than one week, maternity leave and those who were severely sick, unconscious, and mentally-challenged at the time of the study.

**3.5 Sample Size**

The sample size was calculated using Yamane’s formula as follows with the following assumptions for the study:

n= required sample size for the study.

N=population of the study (832)

E = Margin of error (MOE), e=0.05

=

Hence a sample of 270 will be used for the study.

## 3.6 Sampling Technique

A simple random sampling technique was used in this study. A simple random sampling is a probability sampling method where a subset of individuals is chosen from a large set. Hence everyone had an equal chance of being chosen to participate in the study.

## 3.7 Study Variables

The study was made up of a relationship between dependent and independent variables to help measure both variables simultaneously and respectively. While the dependent variables depended on other factors to be measured. Therefore, an effect in an independent variable would likely stimulate a change in a dependent (outcome) variable. The dependent variable was management of HIV/AIDS at the facility which could be classified as good management and poor management.

## 3.8 Data Collection Tool and Technique

A questionnaire was used to collect data. The questionnaire was structured based on the specific objectives outlined earlier. The questionnaire consisted of three (3) sections, A, B, and C. Section A gathered information on participants’ demographic data including sex, age, marital status, educational level, religious affiliation, the cadre of staff, and department of work, years of service, and ever attended a seminar on HIV. Section B consisted of questions that assessed healthcare workers’ knowledge on the management of HIV/AIDS. Section C assessed healthcare workers’ compliance to the HIV/AIDS standard management as stipulated in the Guidelines for HIV/AIDS Care in Ghana.

The data collection was conducted by the principal investigator and two (2) research assistants who were trained to assist in data collection. Participants were interviewed face to face separately to ensure confidentiality and privacy. The data collection process lased for approximately 12 consecutive weeks. To ensure the quality of data, the data collection instrument was pretested on 5% of the sample of health care providers at the Sunyani Municipal hospital.

## 3.9 Data Management and Analysis

Statistical Package for the Social Sciences (SPSS version 26) was used to analyze the quantitative data of this current study. Questionnaires after being collected were thoroughly checked through to ensure all questions were accurately answered and errors corrected to ensure completion before entering them into the SPSS. Data was coded and entered into the SPSS software.

Descriptive analysis was conducted at the Univariate level and data was presented in frequencies and percentages using tables. Means and standard deviation was conducted for continuous variables such as age and years of services variables that are normally not distributed.

A total of 15 Likert-scale items assessed knowledge and practice respectively, with each item scored from 1 (Strongly Disagree) to 5 (Strongly Agree), yielding a minimum possible score of 15 and a maximum of 75. Respondents’ total scores were categorized into three levels of knowledge and practice: poor knowledge/practice (15–35), moderate knowledge/practice (36–55) and good knowledge/practice (56–75). This classification was used to create a categorical variable for further analysis.

The association between the dependent variable and the independent variable used Pearson Chi-square and logistic regression to determine the odds of the relation between the dependent variable and the related factor at the multivariate model using a forward stepwise regression method and a P-value of 0.05 was considered statistically significant.

## 3.10 Study Limitation

Recall bias was a limitation of the study.

## 3.11 Study Piloting/Pre-Testing

The study was pretested among 10 healthcare providers at the Sunyani Municipal Hospital. This is because the Hospital also provides similar ART services HIV/AIDS patients. This was to ensure the reliability and validity of the study data collection instrument. It also helped the researcher to make the necessary corrections identified in the questionnaire before the final one was printed for administration to the participants.

## 3.12 Ethical Considerations

### 3.12.1 Ethical Approval

Ethical approval of the study was obtained from the Kintampo Research Ethics Review Committee. Data collection commenced after ethical clearance is granted.

### 3.12.2 Approval from the study area.

Permission was sought from the Regional Health Directorate Sunyani and the Hospital management team for permission. Permission was obtained and explained to respondents to declare their intention to partake in the study. A copy of the research proposal and an introductory letter was sent to the health management team and approval obtained before the study commenced.

### 3.12.3 Informed Consent

Informed consent of the study was obtained from respondents.

### 3.12.4 Privacy or Confidentiality

Respondents were informed that the information collected from the study will be kept securely and not given to anybody. However, respondents were made aware that, should any member of the ethics committee or the management of the Bono Regional Hospital demand or request the information as part of their routine inspection, it will be given to them without showing the personal details of the study participants.

## 3.13 Results Dissemination

The results of this study will be shared with the management of the hospital and the Regional Health Directorate. It will also be shared with the School of Health and Allied Science of Catholic University of Ghana and published in international journals. A copy of the information sheet and consent forms after it had been signed or thumb printed were given to participants to take home.

# CHAPTER FOUR

# 4.0 RESULTS

## 4.1 Introduction

This chapter presents a comprehensive analysis of the findings of this study. It presents an overview of the sociodemographic and professional characteristics of the healthcare practitioners who participated in the study, and presents findings on their knowledge and practices related to HIV/AIDS management. Finally, it presents a qualitative analysis of the insights shared by healthcare practitioners during an in-depth interview.

## 4.2 Sociodemographic Characteristics

Table 1 presents the sociodemographic characteristics of healthcare professionals involved in this study. The mean age was 30 ± 5.86 years, with majority (42.7%) within the age range of 25-30 years, followed by those aged 31-40 years (34.1%). There were more females (70.5%) than males (29.5%), with more than half (56.3%) being single and most (42.1%) being married. Almost all (99.3%) of the respondents had attained tertiary level of education. Majority (91.7%) were Christians with few (5.3%) Muslims and others (0.7%) being none-religious.

Table 1: Sociodemographic Characteristics of Healthcare Practitioners

|  |  |  |
| --- | --- | --- |
| **Variable** | **Frequency**  **(N = 302)** | **Total**  **(%)** |
| **Age** | **30 ± 5.86** |  |
| 18-24 years | 34 | 11.3 |
| 25-30 years | 129 | 42.7 |
| 31-40 years | 103 | 34.1 |
| 41-50 years | 11 | 3.6 |
| 51-60 years | 1 | 0.3 |
| **Gender** |  |  |
| Female | 213 | 70.5 |
| Male | 89 | 29.5 |
| **Marital Status** |  |  |
| Divorced/Separated | 5 | 1.7 |
| Married | 127 | 42.1 |
| Single | 170 | 56.3 |
| **Level of Education** |  |  |
| Secondary | 1 | 0.3 |
| Tertiary | 300 | 99.3 |
| **Religious Affiliation** |  |  |
| African Traditional Religion | 2 | 0.7 |
| Christianity | 277 | 91.7 |
| Islam | 16 | 5.3 |
| None religious | 2 | 0.7 |

## 4.3 Professional Characteristics

Table 2 presents the professional experience of healthcare professionals involved in this study. The most predominant professional background was nursing officer/midwife officer (22.2%), followed by doctor/nurse/midwife specialist (19.9%) and registered general nurse (19.2%). Most (35.8%) had worked for a period of 1-3 years, followed by those who had worked for more than 6 years (26.2%). Majority (69.2%) of them worked in the ward with few (6.3%) working at the specialist clinic and one (0.3%) working at the antiretroviral clinic. More than half (54.6%) had not received any formal training on HIV/AIDS and same numbers as had had experience with PLHIV (47.7%), had had no such experience.

Table 2: Professional Characteristics of Healthcare Practitioners

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | | **Frequency**  **(N = 302)** | **Total**  **(%)** | |
| **Professional Background** |  | |  |
| Community Health Nurse | 2 | | 0.7 |
| Community Health Nurse | 1 | | 0.3 |
| Doctor/Nurse/Midwife Specialist | 60 | | 19.9 |
| Enrolled Nurse | 29 | | 9.6 |
| House Officer | 12 | | 4.0 |
| Laboratory Scientist | 19 | | 6.3 |
| Medical Officer | 3 | | 1.0 |
| Nursing Officer/Midwife Officer | 67 | | 22.2 |
| Pharmacist | 17 | | 5.6 |
| Physician Assistant | 13 | | 4.3 |
| registered General Nurse | 1 | | 0.3 |
| Registered General Nurse | 58 | | 19.2 |
| Registered General Nurse/Midwife | 16 | | 5.3 |
| **Years of Experience** | |  |  | |
| < 1 year | | 50 | 16.6 | |
| 1 - 3 years | | 108 | 35.8 | |
| 4 - 6 years | | 65 | 21.5 | |
| > 6 years | | 79 | 26.2 | |
| **Department of Work** | |  |  | |
| Out-Patient Department | | 28 | 9.3 | |
| Emergency Unit | | 39 | 12.9 | |
| Specialist Clinic | | 6 | 2.0 | |
| Laboratory | | 19 | 6.3 | |
| Ward | | 209 | 69.2 | |
| Antiretroviral clinic | | 1 | 0.3 | |
| **Formal Training on HIV/AIDS Management** | |  |  | |
| Yes | | 132 | 43.7 | |
| No | | 165 | 54.6 | |
| **Experience with PLHIV** | |  |  | |
| Yes | | 144 | 47.7 | |
| No | | 144 | 47.7 | |

## 4.4 Knowledge on HIV/AIDS Management

As presented in Table 3, the mean knowledge score was 52.63 ± 6.58 with scores ranging from 19 to 71. This suggests a moderate level of knowledge about HIV/AIDS management among healthcare practitioners at the Bono Regional Hospital, with some variation among individuals.

Table 3: Descriptive Statistics for Knowledge Scores among Healthcare Practitioners

|  |  |
| --- | --- |
| **Statistic** | **Value** |
| Valid Responses (N) | 251 |
| Missing Responses | 52 |
| Mean | 52.63 |
| Standard Deviation | 6.58 |
| Minimum Score | 19.00 |
| Maximum Score | 71.00 |

***Knowledge scores were computed based on responses to 15 Likert-scale items related to HIV/AIDS management guidelines.***

## 4.5 Practice of HIV/AIDS Management

Table 4 shows the mean practice score among healthcare practitioners are Bono Regional Hospital being 55.66 ± 6.30, within a range of 31 to 75. This is indicative of a relatively high adherence to HIV/AIDS management practices, with some variability across respondents.

Table 4: Descriptive Statistics for Practice Scores among Healthcare Practitioners

|  |  |
| --- | --- |
| **Statistic** | **Value** |
| Valid Responses (N) | 274 |
| Missing Responses | 29 |
| Mean | 55.66 |
| Standard Deviation | 6.30 |
| Minimum Score | 31.00 |
| Maximum Score | 75.00 |

***Practice scores were computed based on responses to 15 Likert-scale items related to HIV/AIDS management guidelines.***

## 4.6 Factors Associated with Knowledge on HIV/AIDS Management

Respondents’ total knowledge scores were categorized into three levels based on the total possible score: poor knowledge (scores ≤ 25), moderate knowledge (scores 26–50), and good knowledge (scores > 50), for ease of interpretation. Consequently, a Chi-square test of independence was conducted to examine the relationship between healthcare practitioners’ knowledge level on HIV/AIDS management and their sociodemographic characteristics. The results are displayed in Table 5. A statistically significant association was found between gender and knowledge levels, χ² (2, N = 251) = 6.73, p = 0.035, and between religious affiliation and knowledge levels, χ² (6, N = 247) = 18.91, p = 0.004. No significant association was found between knowledge levels and age, χ² (10, N = 251) = 3.56, p = 0.965; marital status, χ² (4, N = 251) = 4.82, p = 0.307; and educational level, χ² (2, N = 251) = 1.68, p = 0.432.

Table 5: Cross-tabulation of Sociodemographic Characteristics and Knowledge Levels

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristic** | **Poor Knowledge** | **Moderate Knowledge** | **Good Knowledge** | **Total** |
| **Age** |  |  |  |  |
| 18-24 years | 0 | 11 | 16 | 27 |
| 25-30 | 1 | 37 | 65 | 103 |
| 31-40 | 0 | 33 | 58 | 91 |
| 41-50 | 0 | 4 | 6 | 10 |
| 51-60 | 0 | 1 | 0 | 1 |
| **Gender** |  |  |  |  |
| Male | 0 | 37 | 38 | 75 |
| Female | 1 | 57 | 118 | 176 |
| **Marital Status** |  |  |  |  |
| Single | 1 | 55 | 76 | 132 |
| Married | 0 | 36 | 78 | 114 |
| Divorced/Separated | 0 | 3 | 2 | 5 |
| **Educational Level** |  |  |  |  |
| Secondary | 0 | 1 | 0 | 1 |
| Tertiary | 1 | 93 | 156 | 250 |
| **Religious Affiliation** |  |  |  |  |
| Christianity | 0 | 88 | 143 | 231 |
| Islam | 1 | 4 | 8 | 13 |
| African Traditional Religion | 0 | 1 | 1 | 2 |
| None Religious | 0 | 0 | 1 | 1 |

Again, a Chi-square test of independence was conducted to examine the relationship between healthcare practitioners’ knowledge level on HIV/AIDS management and their professional characteristics. The results are displayed in Table 6. . A statistically significant association was found between knowledge levels and department of work, χ² (8, N = 251) = 22.26, p = 0.004. No significant association was found between knowledge levels and professional background, χ² (18, N = 251) = 17.84, p = 0.466; years of experience, χ² (6, N = 251) = 5.88, p = 0.437; having received formal training on HIV/AIDS management, χ² (2, N = 251) = 1.33, p = 0.514; and experience with PLHIV, χ² (2, N = 251) = 1.42, p = 0.493.

Table 6: Cross-tabulation of Professional Characteristics and Knowledge Levels

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristic** | **Poor Knowledge** | **Medium Knowledge** | **Good Knowledge** | **Total** |
| **Professional Background** |  |  |  |  |
| Doctor/Nurse/Midwife Specialist | 0 | 13 | 33 | 46 |
| Medical Officer | 0 | 0 | 1 | 1 |
| House Officer | 0 | 2 | 7 | 9 |
| Physician Assistant | 0 | 7 | 5 | 12 |
| Nursing Officer/Midwife Officer | 0 | 17 | 37 | 54 |
| Registered General Nurse/Midwife | 1 | 25 | 39 | 65 |
| Community Health Nurse | 0 | 1 | 1 | 2 |
| Enrolled Nurse | 0 | 8 | 18 | 26 |
| Laboratory Scientist | 0 | 12 | 5 | 17 |
| Pharmacist | 0 | 6 | 9 | 15 |
| **Years of Experience** |  |  |  |  |
| < 1 year | 0 | 16 | 23 | 39 |
| 1 - 3 years | 0 | 32 | 60 | 92 |
| 4 - 6 years | 1 | 16 | 33 | 50 |
| > 6 years | 0 | 30 | 40 | 70 |
| **Department of Work** |  |  |  |  |
| Out-Patient Department | 1 | 6 | 13 | 20 |
| Emergency Unit | 0 | 15 | 19 | 34 |
| Specialist Clinic | 0 | 1 | 5 | 6 |
| Laboratory | 0 | 12 | 5 | 17 |
| Ward | 0 | 60 | 114 | 174 |
| **Formal Training** |  |  |  |  |
| Yes | 1 | 42 | 66 | 109 |
| No | 0 | 51 | 86 | 137 |
| **Experience with PLHIV** |  |  |  |  |
| Yes | 1 | 48 | 70 | 119 |
| No | 0 | 44 | 76 | 120 |

Table 7 displays a Chi-square tests summary for knowledge levels and sociodemographic and professional characteristics of respondents.

Table 7: Chi-Square Tests Summary for Knowledge Levels and Respondents' Characteristics

| **Variable** | **χ²** | **df** | ***p*** |
| --- | --- | --- | --- |
| Age | 3.56 | 10 | 0.965 |
| Gender | 6.73 | 2 | 0.035\* |
| Marital Status | 4.82 | 4 | 0.307 |
| Educational Level | 1.68 | 2 | 0.432 |
| Religious Affiliation | 18.91 | 6 | 0.004\*\* |
| Professional Background | 17.84 | 18 | 0.466 |
| Years of Experience | 5.88 | 6 | 0.437 |
| Department of Work | 22.26 | 8 | 0.004\* |
| Formal Training on HIV/AIDS Management | 1.33 | 2 | 0.514 |
| Experience with PLHIV | 1.42 | 2 | 0.493 |

**p *< .05 is statistically significant, denoted by \* and \*\*.***

## 4.7 Factors Associated with Practice of HIV/AIDS Management

Respondents’ total practice scores were categorized into three levels based on the total possible score: poor practice (scores ≤ 25), moderate practice (scores 26–50), and good practice (scores > 50), for ease of interpretation. Consequently, a Chi-square test of independence was conducted to examine the relationship between healthcare practitioners’ practice level on HIV/AIDS management and their sociodemographic characteristics. The results are displayed in Table 8. There was no statistically significant association was found between knowledge levels and age, χ² (5, N = 251) = 2.63, p = 0.756; gender, χ² (1, N = 251) = 0.92, p = 0.756; marital status, χ² (2, N = 251) = 0.88, p = 0.645; educational level, χ² (1, N = 251) = 0.19, p = 0.661; and religious affiliation having a marginally non-significant association, χ² (3, N = 251) = 6.97, p = 0.073.

Table 8: Cross-tabulation of Sociodemographic Characteristics and Practice Levels

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristic** | **Poor Practice** | **Moderate Practice** | **Good Practice** | **Total** |
| **Age** |  |  |  |  |
| 18-24 years | 0 | 4 | 28 | 32 |
| 25-30 | 0 | 21 | 97 | 118 |
| 31-40 | 0 | 12 | 80 | 92 |
| 41-50 | 0 | 3 | 8 | 11 |
| 51-60 | 0 | 0 | 1 | 1 |
| **Gender** |  |  |  |  |
| Male | 0 | 0 | 16 | 67 |
| Female | 0 | 0 | 28 | 163 |
| **Marital Status** |  |  |  |  |
| Single | 0 | 27 | 125 | 152 |
| Married | 0 | 16 | 101 | 117 |
| Divorced/Separated | 0 | 1 | 4 | 5 |
| **Educational Level** |  |  |  |  |
| Secondary | 0 | 0 | 1 | 1 |
| Tertiary | 0 | 44 | 229 | 273 |
| **Religious Affiliation** |  |  |  |  |
| Christianity | 0 | 37 | 214 | 251 |
| Islam | 0 | 5 | 10 | 15 |
| African Traditional Religion | 0 | 1 | 1 | 2 |
| None Religious | 0 | 1 | 1 | 2 |

Again, a Chi-square test of independence was conducted to examine the relationship between healthcare practitioners’ practice level on HIV/AIDS management and their professional characteristics. The results are displayed in Table 9. There was no statistically significant association was found between practice levels and professional background, χ² (9, N = 251) = 8.02, p = 0.532; years of experience, χ² (3, N = 251) = 0.02, p = 0.999; department of work, χ² (5, N = 251) = 5.63, p = 0.344; having received formal training on HIV/AIDS management, χ² (1, N = 251) = 0.308, p = 0.579; and experience with PLHIV, χ² (1, N = 251) = 1.09, p = 0.296.

Table 9: Cross-tabulation of Professional Characteristics and Practice Levels

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristic** | **Medium Practice** | **Good Practice** | **Total** |
| Professional Background |  |  |  |
| Doctor/Nurse/Midwife Specialist | 9 | 45 | 54 |
| Medical Officer | 0 | 3 | 3 |
| House Officer | 0 | 11 | 11 |
| Physician Assistant | 1 | 12 | 13 |
| Nursing Officer/Midwife Officer | 8 | 50 | 58 |
| Registered General Nurse/Midwife | 12 | 57 | 69 |
| Community Health Nurse | 1 | 2 | 3 |
| Enrolled Nurse | 4 | 24 | 28 |
| Laboratory Scientist | 5 | 11 | 16 |
| Pharmacist | 4 | 12 | 16 |
| **Years of Experience** |  |  |  |
| < 1 year | 7 | 37 | 44 |
| 1 - 3 years | 16 | 83 | 99 |
| 4 - 6 years | 9 | 49 | 58 |
| > 6 years | 12 | 61 | 73 |
| **Department of Work** |  |  |  |
| Out-Patient Department | 4 | 22 | 26 |
| Antiretroviral Clinic | 0 | 1 | 1 |
| Emergency Unit | 3 | 32 | 35 |
| Specialist Clinic | 0 | 6 | 6 |
| Laboratory | 5 | 11 | 16 |
| Ward | 32 | 158 | 190 |
| **Formal Training** |  |  |  |
| Yes | 18 | 105 | 123 |
| No | 25 | 121 | 146 |
| **Experience with PLHIV** |  |  |  |
| Yes | 19 | 114 | 133 |
| No | 25 | 106 | 131 |

Table 10 displays a Chi-square tests summary for practice levels and sociodemographic and professional characteristics of respondents.

Table 10: Chi-Square Tests Summary for Practice Levels and Respondents' Characteristics

| **Variable** | **χ²** | **df** | ***p*** |
| --- | --- | --- | --- |
| Age | 2.63 | 5 | 0.756 |
| Gender | 0.92 | 1 | 0.339 |
| Marital Status | 0.88 | 2 | 0.645 |
| Educational Level | 0.19 | 1 | 0.661 |
| Religious Affiliation | 6.97 | 3 | 0.073 |
| Professional Background | 8.02 | 9 | 0.532 |
| Years of Experience | 0.02 | 3 | 0.999 |
| Department of Work | 5.63 | 5 | 0.344 |
| Formal Training on HIV/AIDS Management | 0.31 | 1 | 0.579 |
| Experience with PLHIV | 1.09 | 1 | 0.296 |

**p *< .05 is statistically significant***

# CHAPTER FIVE

# 5.0 DISCUSSION, RECOMMENDATIONS AND CONCLUSION

## 5.1 Introduction

This chapter is sub-divided into three sections, with the first presenting the discussion of the key findings of the study, relating them to existing literature and the study objectives. The next section provides practical recommendations based on the findings, with the aim to improve compliance to the GHS HIV/AIDS management guidelines. The last section provides an overall conclusion to the study.

## 5.2 Discussion

According to the findings of this study, majority of the healthcare practitioners, being nurses and midwifery officers, had not received any form of formal training on the management of HIV/AIDS. This finding is similar to the findings of a study conducted among nurses in the Kumasi metropolis, Ghana, which reported that majority of them had not been formally trained in HIV/AIDS-related management (Boakye & Mavhandu-Mudzusi, 2019). Similarly, a study conducted in Austria reported that less than half the number of nurses and doctors in a healthcare facility had been trained in any issues pertaining to HIV/AIDS (Vorasane et al., 2017). The lack of training in these studies could be attributed to the unavailability of adequate resources to effectively carry out the training. Consequently, studies have shown that healthcare practitioners who have received some form of training on HIV/AIDS-related issues were more likely to display excellent services towards PLHIV (Pal et al, 2016).

Although most of the healthcare practitioners had not been trained in the management of HIV/AIDS according to the GHS guidelines, and had not had much interaction with PLHIV, they demonstrated a moderate level of knowledge in the management of the disease. This can be confirmed by a study which reported that doctors and nurses were more likely to possess knowledge of HIV/AIDS treatment and management protocols compared to those of other healthcare disciplines (Eticha & Gemeda, 2019). This finding is further confirmed by another study conducted in Nigeria where it was reported that doctors, nurses and laboratory scientists, because of their roles in diagnosing, caring, and investigating cases of HIV/AIDS respectively, increase their level of knowledge about the infection (Owolabi et al., 2012). These findings notwithstanding, formal training workshops for healthcare practitioners on management guidelines for HIV/AIDS should not be overlooked, as it is imperative in providing effective treatment regimen, especially in instances when PLHIV have co-morbid health conditions (Oladele et al., 2023).

Some factors that were found to be statistically significant in determining knowledge levels among healthcare practitioners in relation to HIV/AIDS management guidelines included gender and religious affiliation. Most respondents in this study were females and Christians respectively. To corroborate the findings of this study, Magdi et al. (2013) reported that Muslims are taught on sicknesses as part of their religion, and hold a firm belief that they cannot contract HIV. Consequently, high knowledge levels were reported among these Muslim nurses in Egypt (Magdi et al., 2013). The finding of gender being a determinant of knowledge levels can be attributed to the fact that most of the respondents of this study were nurses, who are predominantly females.

Although years of experience in their professional background was not found to be statistically significant to determining knowledge levels among healthcare professionals in this study, there have been studies that have established a significant relationship. According to Mathewos et al. (2013), healthcare practitioners who had been on the job for less than six months were more likely to possess lower levels of knowledge compared to those who had been working for longer. Further, Owolabi et al. (2012) reported from the findings of their study that healthcare practitioners with longer years of experience were more likely to provide efficient and efficacious care for PLHIV compared to those who had been working for lesser number of years.

Healthcare practitioners involved in the present study were found to have a high adherence to HIV/AIDS management guidelines despite the fact that they had not received any formal training in relation to the management. According to Owolabi et al. (2012), even in the absence of any formal training on HIV/AIDS management, the frequency of attending to the same cases time and again equips healthcare practitioners with the skills to provide prompt and effective management.

No sociodemographic characteristic was found to be statistically significant in determining the practice levels among healthcare practitioners in relation to HIV/AIDS management guidelines. This is contrary to findings from a studies conducted among religious individuals (**Ebrahimi et al., 2020; Scott et al., 2021**). According to Ebrahimi et al. (2020), because Islam frowns of extramarital affairs and homosexuality, Muslim healthcare practitioners refrain from attending to individuals who present to healthcare facilities with HIV/AIDS. Also, because Jews and Christians both frown on similar practices, healthcare practitioners who belong to these religions exhibit similar behavior towards PLHIV as the Muslims (Scott et al., 2021). On the contrary, a study carried out among nurses in Puerto Rico reported that nurses’ religious beliefs was the main contributing factor to they providing care for PLHIV (Reyes-Estrada et al., 2018).

## 5.3 Recommendations

From the findings of this study, majority of the healthcare practitioners had not received any formal training on the GHS HIV/AIDS management guidelines. Hence, it is recommended that standardized and comprehensive training sessions should be organized for healthcare practitioners in the Bono Regional Hospital, in order to enhance their competence and confidence in providing care to PLHIV. Further, given the fact that all healthcare practitioners are required to engage in continuing professional development (CPD), it is a viable recommendation for HIV/AIDS management according to the GHS guidelines to be integrated into these CPD programs. In addition to ensuring that healthcare practitioners who have limited contact with PLHIV are updated with current management practices, it will maintain and improve the knowledge and skills of practitioners who have interactions with PLHIV.

From the findings of this study, healthcare practitioners demonstrated a moderate level of knowledge on HIV/AIDS management guidelines, despite a lack of formal training, which has been attributed to the fact that such knowledge they possess was theoretically acquired in school (Eticha & Gemeda, 2019), or practically acquired with long years of practice (Owolabi et al., 2012). Hence, targeted education interventions should be organized with the aim to bridge the existing knowledge gaps, especially since there are constant updates to management protocols in healthcare delivery. Further, this will bridge the gap between practical exposure and theoretical knowledge.

Again, although years of experience was not statistically significant to knowledge and practice of HIV/AIDS management guidelines in this study, other studies have discovered otherwise, giving rise to the recommendation for peer learning and mentorship programs to be established in the Bono Regional Hospital. Consequently, more experienced healthcare practitioners can share their best practices and insight with less-experienced practitioners. In addition, the high level of adherence to HIV/AIDS management guidelines despite the absence of formal training should be commended by the healthcare facility. This will encourage practitioners to stick to present practices, and seek to update their knowledge and practices with recent protocols.

Finally, after the implementation of formal training programs and integration of HIV/AIDS management guidelines into CPD programs, it is recommended that a robust monitoring and evaluation framework is established to assess healthcare practitioners’ knowledge and practices periodically. This will help to measure practitioners’ strengths and weaknesses, and necessary adjustments and improvements made as required.

## 5.4 Conclusion

This study assessed the knowledge and practice of healthcare practitioners in Bono Regional Hospital regarding their compliance to the Ghana Health Service guidelines for HIV/AIDS management, and the factors that influence them. The findings of the study revealed that despite limited to no formal training on the management guidelines, healthcare practitioners demonstrated a moderate level of knowledge and high compliance to the guidelines. Gender and religious affiliation were identified to be significantly associated with knowledge levels, while no sociodemographic or professional characteristics were found to influence practice levels. These results demonstrate the need for well-structured formal training and CPD programs to strengthen practitioners’ knowledge, while implementing strategies to sustain the commendable practice standards already being exhibited.

# APPENDIX I: STUDY PLAN

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Activity** |  | **Period** |
| 1 | Presentation of proposal | Literature Review | January, 2024 |
| 2 | Revised Proposal | January , 2024 |
| 3 | Submission for ethical approval | January , 2023 |
| 4 | Data collection | February , 2023 |
| 5 | Data analysis | April , 2023 |
| 6 | Summary of findings, conclusions and recommendations | May, 2024 |
| 7 | Submission of first draft report | May , 2024 |

# APPENDIX II: BUDGET AND BUDGET JUSTIFICATION

This is an estimated budget for the study based on current prices of needed items and is subject to change should the prices of items for instance cost of printing, transportation change.

|  |  |  |
| --- | --- | --- |
| **ITEM** | **COST (GHC)** | **Justification** |
| Literature Search/Data bundle | 150 | To purchase airtime/data bundle that would be used to download published articles as well as pay for scholarly articles |
| Consultation and expert contribution. | 400 | To pay for expert contribution on the topic under study |
| Ethical clearance | 300 | Pay for the cost for ethical clearance |
| Producing research output through printing | 150 | To purchase printing sheets as well as pay for printing costs |
| Consulting experts on data analysis | 500 | To pay for expert contribution and consultation related to statistical data analysis |
| Stationeries | 400 | To pay for the cost of stationeries |
| Final Thesis (3 copies) | 450 | To print and bind final work |
| Miscellaneous | 400 | To cater for fluctuations and other expenses where necessary |
| **Total** | **2750** | The total estimated budget for the research |

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# APPENDIX III: STUDY QUESTIONNAIRE

**NON-COMPLIANCE AND FACTORS ASSOCIATED WITH HIV/AIDS MANAGEMENT IN BONO REGIONAL HOSPITAL AMONG HEALTHCARE PRACTITIONERS: COMPARING GHS STANDARD MANAGEMENT WITH ACTUAL PRACTICE**

**INTRODUCTION**

HIV/AIDS continues to be a global public health challenge with far-reaching social, economic, and healthcare implications. In the pursuit of effective management and care for individuals living with HIV/AIDS, adherence to established guidelines and protocols is of paramount importance. In healthcare settings, particularly within hospitals, healthcare practitioners play a pivotal role in the implementation of these guidelines and ensuring optimal patient care. Non-compliance with established standards in the management of HIV/AIDS can have serious consequences, including compromised patient outcomes and increased healthcare costs.

The Bono Regional Hospital, situated in the heart of Ghana, represents a critical healthcare institution in the country's efforts to combat HIV/AIDS. As part of the broader healthcare system in Ghana, this hospital is entrusted with the responsibility of delivering quality care to individuals living with HIV/AIDS. Within this context, understanding the factors associated with non-compliance among healthcare practitioners regarding the management of HIV/AIDS becomes essential. Moreover, comparing the actual practices of healthcare practitioners with the Ghana Health Service (GHS) standard management guidelines can provide valuable insights into areas that require improvement and further support.

This academic questionnaire seeks to delve into the complex dynamics surrounding non-compliance and the factors influencing the management of HIV/AIDS at the Bono Regional Hospital. By examining the practices of healthcare practitioners in this specific setting and comparing them to established standards, this study aims to shed light on critical issues related to HIV/AIDS care and management.

Confidentiality is a top priority in this study. All responses and information provided in this questionnaire will be kept strictly confidential. The data collected will be anonymized and reported in aggregate form, ensuring that individual participants cannot be identified. Any identifying information will be removed or disguised to protect the privacy of the participants.

The insights gained from this research are expected to contribute significantly to the enhancement of HIV/AIDS care and management practices at the Bono Regional Hospital and, by extension, inform policy and practice in healthcare settings across Ghana. Ultimately, the goal is to improve patient outcomes and contribute to the global efforts to effectively combat HIV/AIDS.

**SECTION A: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS**

**The questions in this section are about yourself and your background.**

1. Please state your age: \_\_\_\_\_\_\_\_\_\_
2. Please indicate your gender

[ ] Male

[ ] Female

1. Please indicate your marital status

[ ] Single

[ ] Married

[ ] Divorced/Separated

[ ] Widowed

1. Please indicate your level of education

[ ] Never educated

[ ] Primary

[ ] Secondary

[ ] Tertiary

1. Please indicate your professional background

[ ] Doctor/Nurse/Midwife Specialist

[ ] Medical Officer

[ ] House Officer

[ ] Physician Assistant

[ ] Nursing Officer/Midwife Officer

[ ] Registered General Nurse

[ ] Community Health Nurse

[ ] Enrolled Nurse

[ ] Laboratory Scientist

[ ] Pharmacist

1. Please indicate your religious affiliation:

[ ] Christianity

[ ] Islam

[ ] African Traditional Religion

[ ] None religious

[ ] Other

1. How many years of experience do you have in your professional background?

[ ] < 1 year

[ ] 1 – 3 years

[ ] 4 – 6 years

[ ] > 6 years

1. In which department do you work?

[ ] Out-Patient Department

[ ] Antiretroviral Clinic

[ ] Emergency Unit

[ ] Specialist Clinic

[ ] Laboratory

[ ] Ward

1. Have you ever attended a formal training on HIV/AIDS management?

[ ] Yes

[ ] No

1. Do you have experience with PLHIV?

[ ] Yes

[ ] No

**SECTION B: KNOWLEDGE ON HIV/AIDS MANAGEMENT**

**The following questions will assess your knowledge on HIV/AIDS management. They are based on the GHS standard management protocols. Kindly answer as accurately as possible.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Knowledge** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
| 1. Confidentiality is important when handling clients’ HIV test results |  |  |  |  |  |
| 1. It is necessary to disclose clients’ HIV test results to other healthcare providers |  |  |  |  |  |
| 1. Written consent is not required for HIV testing |  |  |  |  |  |
| 1. Clients’ have the right to refuse HIV testing |  |  |  |  |  |
| 1. Only practitioners responsible for a clients’ medical condition should have access to their records |  |  |  |  |  |
| 1. HIV-positive clients have the right to marry without any conditions |  |  |  |  |  |
| 1. There is a distinction between Client-Initiated Testing and Counselling (CITC) and Provider-Initiated Testing and Counselling (PITC) |  |  |  |  |  |
| 1. Clients should be offered pre-test counselling for CITC |  |  |  |  |  |
| 1. There are no consequences for discrimination or denial of services based on HIV status |  |  |  |  |  |
| 1. There are no requirements for obtaining informed consent, including written consent for adolescents and vulnerable groups |  |  |  |  |  |
| 1. HIV infection is a chronic condition that requires lifelong therapy |  |  |  |  |  |
| 1. HIV infection is definitively curable |  |  |  |  |  |
| 1. Nutritional status and capacity to adhere to treatment should be assessed during clinical evaluation |  |  |  |  |  |
| 1. ART initiation should not be delayed due to baseline laboratory tests. It can be initiated while the tests are pending |  |  |  |  |  |
| 1. Clients with opportunistic infections should be treated first before ART initiation |  |  |  |  |  |

**SECTION C: PRACTICES OF HIV/AIDS MANAGEMENT AGAINST GHS STANDARD MANAGEMENT**

**This section shall compare your actual practice of HIV/AIDS management against the Standard Guidelines provided by the Ghana Health Service. Kindly answer as accurately as possible.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Practice** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
| 1. I disclose clients’ HIV test results to other healthcare providers for appropriate medical care |  |  |  |  |  |
| 1. I ensure that clients fully understand the purpose and benefits of HIV testing before proceeding |  |  |  |  |  |
| 1. I do not respect clients’ decisions if they choose to refuse HIV testing. I ensure they agree to test. |  |  |  |  |  |
| 1. I escort clients to the point for ART registration and clinical assessment when they test positive |  |  |  |  |  |
| 1. I ensure that clients who have tested HIV positive in the community are linked to their ART site of choice |  |  |  |  |  |
| 1. I perform regular follow-ups after ART linkage |  |  |  |  |  |
| 1. I counsel clients effectively on how to handle their HIV status when written results are provided |  |  |  |  |  |
| 1. I conduct physical examination and take past medical and social history before initiating ART |  |  |  |  |  |
| 1. I prioritize the treatment of opportunistic infections and initiate ART once the client is stabilized |  |  |  |  |  |
| 1. I initiate ART promptly without delaying treatment when baseline laboratory test results delay |  |  |  |  |  |
| 1. I evaluate the nutritional status of clients before initiating ART |  |  |  |  |  |
| 1. I involve clinicians, pharmacy staff, counsellors and nutritionists in providing management to PLHIV |  |  |  |  |  |
| 1. I assess the clients’ capacity to adhere to treatment before initiating ART |  |  |  |  |  |
| 1. I actively participate in networking with other ART sites to facilitate the referral process |  |  |  |  |  |
| 1. I encourage HIV-positive clients to get married without disclosure to their partner |  |  |  |  |  |