ENSIGN COLLEGE OF PUBLIC HEALTH, KPONG EASTERN REGION, GHANA

HEALTH SEEKING BEHAVIOUR OF PERSONS LIVING WITH HIV: A CASE STUDY AT THE KORLE-BU TEACHING HOSPITAL, ACCRA - GHANA

BY

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A Thesis submitted to the Department of Community Health in the Faculty of Public Health in partial fulfilment of the requirements for the degree

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DECLARATION AND CERTIFICATION

I, Clifford Ladzekpo, declare that this submission is my own work towards the MPH and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

HIV, the virus that causes AIDS, has posed one of the worst global health and developmental challenges the world has ever witnessed: with its devastating impact on humans, the need to adopt a more proactive and pragmatic step to ensure zero new infections and reduce the incidence of HIV-related deaths is paramount. This study set out to explore and describe the health seeking behaviour of persons living with HIV and attendant impact of stigma on health seeking behaviour.

Open and closed ended structured questionnaires were used as data collection instruments to explore and describe the health seeking behaviours of PLHIV's who attend clinic at the fevers unit of the Korle-Bu Teaching Hospital (KBTH). Participants were selected through systematic random sampling. Descriptive, bivariate and multivariate analysis was employed.

The logistic regression analysis indicated a significant association between treatment adherence and the respondents who took all their medications a day before the study, and were 9.2 times more likely to adhere to treatment compared to those who did not take their medication ($p<.001$ 95CI 4.39-19.27)

The scare HIV brings to individuals, families and communities and the corresponding remedial behaviour is not the same. The causative and remedial knowledge gap of HIV in various communities, including the scientific community has changed progressively. Consequently, perceptions and attitudes have seen remarkable change resulting in positive health seeking behavior of persons living with HIV at the fevers unit of the Korle-Bu Teaching Hospital, Accra-Ghana.

ABBREVIATIONS

ARV - Antiretroviral drug

FU – Fevers Unit

HCSB- Health Care Seeking Behaviour

HIV/AIDS – Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

HSB - Health Seeking Behaviour

ICT – Information Communication Technology

KAP – Knowledge Attitudes Practices

KBTH – Korle-Bu Teaching Hospital

LEKMA – Ledzokuku-Krowor Municipal Authority

OPD – Out Patient Department

PEPFAR- Presidents Emergency Plan for AIDS Relief

PLHIV – Persons Living With HIV

STD – Sexually Transmitted Disease

UN – United Nation

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

HIV, the virus that causes AIDS, has posed one of the worst global health and developmental challenges the world has ever witnessed: with its devastating impact on humans, the need to adopt a more proactive and pragmatic step to ensure zero new infections and reduce the incidence of HIV-related deaths is paramount.

At the close of 2015, globally, about 36.7 million people were living with HIV/AIDS. (UNAIDS 2016) Low to middle income countries accounts for higher number of people living with HIV. Sub-Saharan Africa is the region that is severely impacted with this epidemic. Since the beginning of the epidemic in 1981, about 35 million people have lost their lives from AIDS related illness, and the 2015 death toll alone, is about 1.1million. (UNAIDS 2016)

The UNAIDS strategy to end the over three decades epidemic by 2030, and the 2016 United Nations Political Declaration to end AIDS,(Anon n.d.) : The joint action of the United Nations (UN), the United States President's Emergency Plan For AIDS Relief (PEPFAR) led by the UNAIDS to achieve zero new infections, zero AIDS-related deaths and zero discrimination (Grossman et al 2013) is hinged on the Health Seeking Behaviours of Persons Living with HIV.

Generally, health behaviour includes all behaviours associated with establishing and maintaining a healthy physical and mental state (Primary Prevention). Health-seeking behaviours also include remedial actions that deal with any departure from the healthy state, such as controlling

(Secondary Prevention) and reducing impact and progression of an illness (Tertiary prevention).(Uche 2017)

Precisely, health seeking behaviour could be pronounced from the analysis of data indicating the time difference between the onsets of an illness and when a health professional or facility is contacted: the type of health provider patients choose for help, patient adherence to the recommended treatment, what informed the choice or otherwise of healthcare professional.

1.2 Problem Statement

Living with HIV/AIDS, particularly in sub-Saharan Africa and for that matter Ghana can be daunting, where premium is placed on cultural values and societal norms predicated on faith and high morals.

The 2014 National HIV and AIDS Estimates, and UNAIDS status report, indicate that Ghana has over 250,000 persons living with HIV. (Bash 2014) (Aids 2016)

In 2015, Greater Accra region recorded a prevalence rate of 3.2. This placed Greater Accra on top of the Regional table and ahead of the Eastern region which hitherto has been leading the regional prevalence table. (GAC 2016)

The wellness of Persons Living with HIV (PLHIV) is critical to the socio-economic development of any society, since any compromise to this outcome could have dire consequences for the society. PLHIV are potentially confronted with acts of social exclusion. Stigma, as found by Levi-minzi, “has been associated with harms to health and well-being, including under-utilization of HIV- related medical care”.(Levi-minzi et al 2014)

Erving Goffman describes stigma or social devaluation “as a mark of social disgrace” perceiving the stigmatised untrustworthy, incompetent, or tainted. Owing to this “mark of social disgrace” PLHIV’s feels that seeking treatment is disgraceful, and could consequently influence their health seeking behaviours.(Goffman 1963)

Health is said, is Life, therefore the usual expectation is that people would make the requisite choices that would ensure the state of wellness, however this is very often challenged by many socio cultural and economic issues.

1.3 Rationale of Study

Considering the major scientific strides in understanding HIV, the natural or logically expectation is that the global village should have subdued the HIV pandemic.

However, stigma, and other socio-cultural and demographic factors continue to serve as stumbling blocks, in benefiting and accessing the various Public Health Interventions and the retaining of PLHIV’s in medical care.(Loutfy et al. 2012)

In view of improvement in screening tools, diagnostics and treatment protocols: vis-a-vis the renewed commitment to realise the 90-90-90 target by 2020. Thus “90% of people living with HIV know their HIV status, 90% of people who know their HIV positive status are accessing treatment and 90% of people on treatment have suppressed viral loads”. (Aids 2016)

Hence the need to assess the health seeking behaviours (HSB) of PLHIV, and understand how these factors interact to inform their choices, and shape their HSB in order to ensure optimum healthcare coverage and access by way of interventional and healthcare facility operational policies.

1.4 Hypothesis/Conceptual Framework

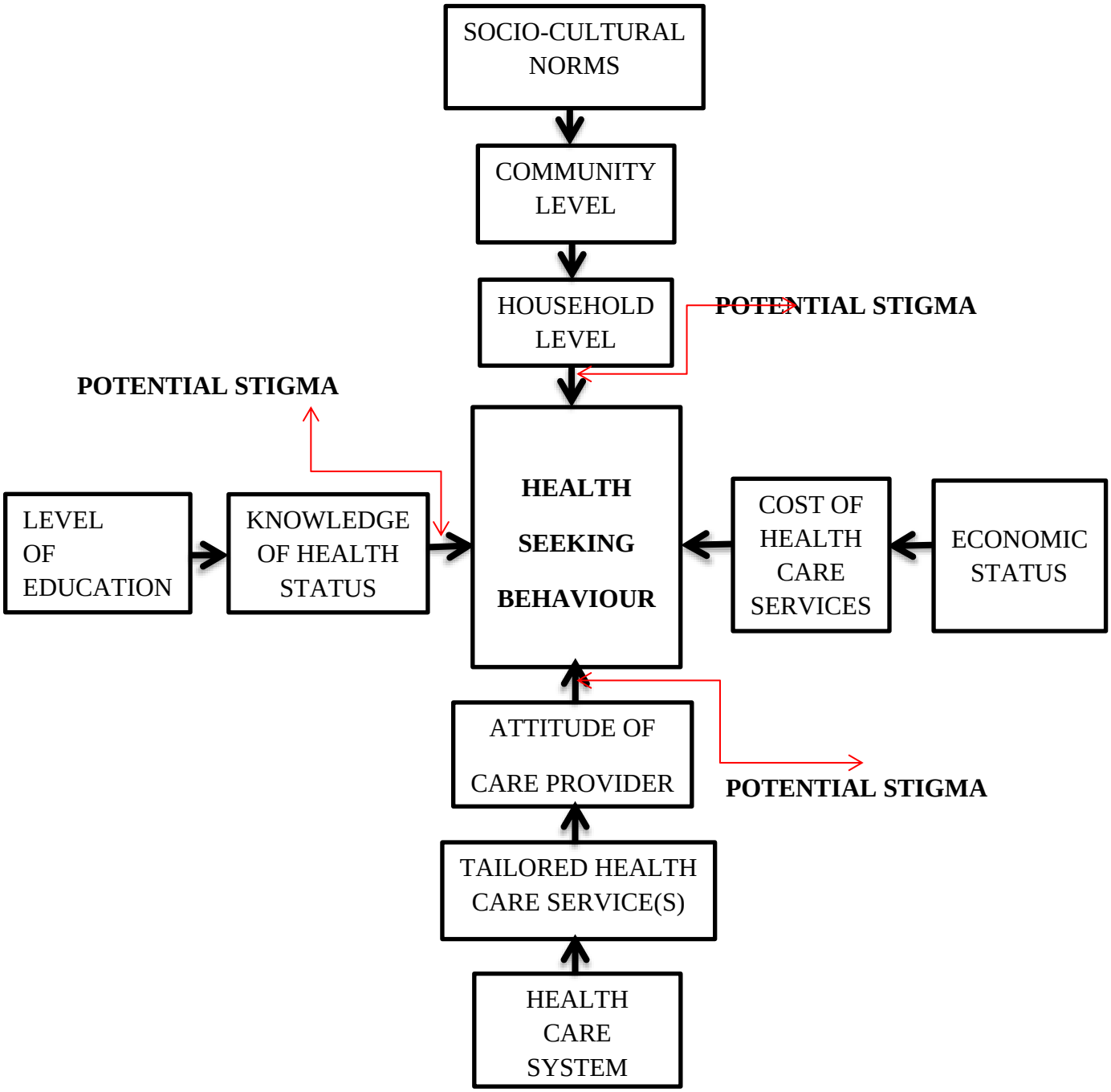


Figure 0: FACTORS INFLUENCING THE HEALTH SEEKING BEHAVIOR OF PLHIV'S

1.5 Research Questions

1. What are the health seeking practices of PLHIV?

2. What are the effects of stigma on health seeking behaviours of PLHIV?

3. What are the knowledge, attitudes and practices of PLHIV?

1.6 General Objectives

To contribute human-centred knowledge approach to the HIV/AIDS response through the examination of the HSB of PLHIV, and to provide scientific basis that would ensure relevant, sustainable and credible policy interventions in the quest to control the HIV pandemic.

1.7 Specific Objectives

1. To explore and describe the health seeking behaviours and practices of PLHIV

2. To assess how stigma affects health seeking behaviours of PLHIV

1.8 Profile of Study Area

The study was conducted in Accra, the capital city of Ghana, specifically at the fevers unit of the Korle-Bu Teaching Hospital (KBTH). KBTH is Ghana's leading national referral centre and the third largest hospital in Africa. KBTH operates three centres of excellence, the Reconstructive Plastic Surgery and Burns Centre, the National Cardiothoracic Centre and the National Centre for Radiotherapy and Nuclear Medicine. Korle-Bu was established in 1923 with 192 bed capacity and now with 2000 beds and 21 clinical or diagnostics department. The Fevers unit is under the department of medicine at Korle-Bu teaching hospital where about 24,000 Persons Living with HIV receive antiretroviral therapy ART. The Fevers Unit also handles the following cases measles, rabies, chicken pox, tetanus and chronic diarrhoea.

1.9 Scope of Study

The study is a descriptive study, aim at exploring and describing the health seeking behaviour (practices) of persons living with HIV (PLHIV). Assessing how stigma impacts the health seeking behaviour of PLHIV's.

1.10 Organisation of Report

The entire research work is presented in five (5) main chapters. Chapter one provides an introductory background, statement of the problem, objectives of the study, the hypothesis, limitations and rationale of the study. Chapter two presents a review of relevant literature from secondary sources on HIV and related stigma, with emphasis on the concept of Health Seeking Behaviour. Chapter three deals with the methods applied in the research such as primary data collection tools, study population, sampling technique and ethical considerations. Chapter four presents the results of the analysis and interpretation of the data collected from the study participants. Chapter five discusses the research findings, and presents conclusions and recommendations for the benefit of all stakeholders and those who may be interested in further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The focus of this chapter is to unfold the concept of Health Seeking Behaviour (HSB) and the impact of stigma on the HSB of Persons Living with HIV, by reviewing the theoretical concepts and various scholarly works. Health seeking behaviour serves as a tool in healthcare delivery to measure the choice and practices of individuals, communities and populations to establish and maintain health.

2.1 Concept of Health Seeking Behaviour

Health seeking behaviour may be understood to mean the sequence of activities that an individual or community of people engage in order to maintain or improve their well-being.

Uche (2017) on Mac Kian 2003 defines health seeking behaviour as a "series of corrective measures which individuals undertake to resolve perceived ill-health" Broadly speaking, health seeking behaviour includes all the behaviours connected with establishing and maintaining a healthy physical and mental state, which, in other words, is referred to as primary prevention. It also entails behaviours which deal with any deviation from the healthy state, such as the control (secondary prevention), and reduction of impacts and progression of an illness (tertiary prevention)

2.2 Health Care Seeking Behaviour and Health Seeking Behaviour

Health care-seeking behaviour (HCSB) is not the same as Health seeking behaviour (HSB). Mackian unequivocally states, health care-seeking behaviour is principally about "end point utilization" the use of health facility or service; whereas, health-seeking behaviour is "process"

all behaviours associated with establishing and maintaining health or otherwise. Mackian reported how Ahmed et al 2000 captured health care seeking behaviour as “sequence of remedial action” engaged to correct “perceived ill health”. To reiterate Mackian’s assertion, health seeking behaviour is not premised on “perceived ill health”, but the adoption of health promoting behaviour.(Mackian et al. 2004) Hence, health care seeking is part of the process of health seeking behaviour.

2.3 Dynamics of Health Seeking Behaviour

The desire is to have health restored or better health, therefore what defines or informs health seeking behaviour is multi-faceted.

Musoke (2013) asserts that whereas individually we differ in terms of how we seek health; the health seeking behaviour of a community influences how people in these communities use health services. In another dimension, utilisation of health facilities can be influenced by the cost of services, distance to health facilities, cultural beliefs, level of education and health facility inadequacies such as stock-out of drugs and client (patient) and healthcare professional relations.(Musoke et al. 2013)

As a result of the many factors that influence health seeking behaviour of individuals and communities, the need to develop effective models to measure health seeking behaviour efficiently is critical to the success of interventional program planning and implementation.

2.4 Relevance of Health Seeking Behaviour

The concept of health seeking behaviour has gained popularity in recent years as an important tool for exploring and understanding client delay and prompt action across a variety of health conditions (Cornally et al 2011). The reason for this surging interest in health seeking behaviour

is because policy makers and caregivers understand that the appropriate and timely care seeking is essential for healthy outcomes for individuals and communities.

2.5 Stigma

Of particular interest is the growing stigmatisation of persons with Sexually Transmitted Diseases (STDs). Stigmatisation defines the state of mind which makes an individual feel ashamed, outcast and looked down upon given his or her challenged condition.

Deacon argues that stigmatisation comes about via a social process during which the following occurs: illness is perceived as preventable, and caused by identifiable "immoral" behaviour. This behaviour is associated with certain groups that "carry" the illness, which draws on existing social constructs of the "other", who are consequently blamed for becoming infected.(Deacon 2006) Asiedu found that women tend to experience negative impact of HIV related stigma than men, and suggest such finding could inform interventions (Asiedu et al. 2014)

Stigma and discrimination has been cited as a key obstacle to the response of HIV/AIDS pandemic.(Mahajan et al. 2008) As Grossman traced the genesis of HIV related stigma to Goffman's note on stigma: as a trait that is demeaning, labeled "spoiled identity" with the potential of making the stigmatized person(s) an outcast "off from society and from himself" (Grossman et al 2013)

Stigma related to HIV spans a range of sources; therefore Levi-Minz (2014) captures how Earnshaw et al sought to unravel the diverse areas of stigma. Imposing the undesirable view of a condition, and for that matter HIV on self to experience psychological trauma due is termed "internalized stigma". Also to suffer exclusion or rejection from others due false judgment of what your status is termed "enacted stigma; and finally to assume and suspect discrimination

from people because of HIV status is termed as “anticipated stigma”. These types of stigma do have dire health implications.(Levi-minzi et al 2014)

2.6 Stigma and Health Seeking Behaviour

Aside the cost of health care and the general poor service delivery mostly in developing countries; stigmatization has become the principal influence on health seeking behaviour of people. Therefore, what is the relationship between stigmatisation and health seeking behaviour among people with STDs notably HIV.

Under different headlines Deacon et al (2006) constructed a sustainable theory of health-related stigma that brought together both the individual and social factors. It describes stigmatization as this complex phenomenon that may affect the behaviour of the individual or community in seeking health care.(Deacon 2006)

Medical care uptake, treatment adherence and psychiatric challenges, just to mention a few, are the observed impact of stigma on the health seeking behaviours of PLHIV; thereby resulting in sub optimal benefit of available program intervention and health care services. (Levi-minzi et al 2014)

This is important to key stakeholders because they are critical elements of wellbeing and essential ingredient of human development. Again, knowledge about health care seeking behaviour is very crucial in health care policy formulation, early diagnosis, effective treatment and implementation of appropriate interventions in the rural areas where productive tasks are labour-intensive (Uche 2017)

2.7 Policy Implication of Health Seeking Behaviour

The quest to have HIV free generation renewed after three decades of the epidemic within the United Nation agencies and the scientific world, owing to the recent biomedical prevention success called for strategies to interfere or stop the process of stigma and the ill impact of enacted or self-inflicted stigma and discrimination, in order to ensure enabling environment for prevention, care and treatment of HIV.(Grossman et al 2013)

Much as these decision and recommendations are germane; it behoves local governments and respective agencies or departments to churn out locally relevant interventional programs, policies and healthcare systems made operational at community level and various health facilities.

CHAPTER THREE
3.0 METHODS

3.1 Research Method and Design

This was a descriptive cross-sectional study to evaluate the health seeking behaviours of persons living with HIV (PLHIV). The study employed quantitative method with a structured questionnaire.

3.2 Data Collection Techniques and Tools

Open and closed ended structured questionnaires were used as data collection instruments to evaluate the health seeking behaviours of PLHIV's who attend clinic at the fevers unit of the Korle-Bu Teaching Hospital (KBTH). Research assistants, who are students studying social science in a tertiary institution administered the structured questionnaires to respondents. The questionnaire included socio demographic information, medical care initiation and delay, clinic attendance, adherence to treatment prescription, sexual behaviours, choices and stigma or discrimination.

3.3 Study Population

The fevers unit of KBTH has a population of about 24,000 adult PLHIV's. To determine the study sample size, Raosoft sample size calculator was used, at 95% CI, with 5% margin of error and 10% non-response rate with the assumption of incomplete questionnaire, and refusal to respond to some of the questions. A total of 416 adult respondents were involved in the study, with a minimum age of 18years and a maximum of 75years. (http://www.raosoft.com/samplesize.html)

Inclusion and exclusion criteria

Adhered to inclusion criteria of minimum age of 18 years, and diagnosed at least 1 year before the study.

3.4 Study Variables

The dependent or response variable for this study was sexual choices, clinic attendance, drug or treatment adherence, while the independent or explanatory variables were knowledge and perception of HIV/AIDS, stigma or discrimination of persons living with HIV.

3.5 Sampling

The sample method of the study was systematic random sampling. This sampling method was used to select study participants. Codes were assigned to each PLHIV that came to clinic. The first participant was randomly picked from the pool of codes. After which the subsequent participants were determined after every two count according to the codes.

3.6 Pre-testing

Pre-testing was carried out at the Ledzokuku-Krowor Municipal (LEKMA) Hospital. The data collection instrument was tested on 25 PLHIV's who attends clinic at the LEKMA hospital, in the Greater Accra region.

3.7 Data Handling

Data was handled and kept with strict confidentiality. The research assistants ensured that administered questionnaires were returned and securely kept under lock in the office of the principal researcher.

3.8 Data Analysis

Collected data was entered with Microsoft excel, and subsequently cleaned. Statistical software STATA version 14 was used to perform the requisite analysis for descriptive statistics, bivariate and multivariate logistics regression analysis for possible associations and factors influencing respondents' behaviour.

3.9 Ethical Consideration

Approval was sought from Ensign College of Public Health, the Ethical Review board, Head of Fevers Unit, and the Ethical Board of the Korle-Bu Teaching Hospital (KBTH).The purpose of the study was explained to respondents, and subsequently secured a written informed consent from respondents. Confidentiality was adhered to strictly during the capturing of data from respondents.

3.10 Limitations of Study

The obvious lack of capacity and unwillingness of respondents to truthfully state the income levels since majority are self-employed. Also, owing to the fact that this study is a facility based, limits a comprehensive appreciation of HSB of PLHIV's in general. Therefore, findings may not reflect the general HSB of PLHIV.

3.11 Assumptions

The hypotheses of the study were that the health seeking behaviors of PLHIV is negative, and that stigma affects the health seeking behavior of PLHIV and the choice of location for care. Also, with the assumption that study participants would be candid with the information they provide.

CHAPTER FOUR

RESULTS

4.0 Introduction

The results of a study on the health seeking behaviour of persons living with HIV at the fevers unit (FU) of the Korle-Bu Teaching Hospital (KBTH), Accra. A total of 413 PLHIV out of the 416 questionnaires administered was entered and analysed to constitute this result. The three administered questionnaires were not completed, hence the decision to exclude them from the analysis, resulting in 99.3% response rate. The results are presented in a descriptive form and associations between variables of the study population. Employed bivariate and multivariate analysis to establish associations and explore possible factors influencing health seeking behaviour.

4.1 Socio-Demographic Characteristics of Participants

The 413 participants had a minimum age of 18years and maximum of 75years. The mean age was 43.8 ($\pm$10) years and the median was 42years. The sex distribution had 305 females representing (74%) and the male population was 108 representing (26%).

The married had the highest population of 41.6% (172) followed by widowed population who were 20.6% (85) with the singles numbering 18.9% (78) while those divorced were 16.2% (67) and those cohabitating were 2.7% (11).

The dominant religious group among the PLHIV's was Christianity, recording 88.9% (367) while those with Islamic faith were 10.4% (43) and only 0.7% (3) had faith in the African traditional religion.

The level of education attained by the participants: those who had pre secondary (middle/JSS) were 42.6% (176) while those with secondary or SHS were 16% (66) then those who had only primary education were 15.5% (64) and for tertiary level, 13.8% (57) and the remaining 12.1% (50) had no formal education.

Majority of the respondents 69% (286) were self-employed, and 15% (61) were unemployed while those employed had 11% (45) engaged in the private sector and the public sector (Gov't workers) had only 5% (21) in employment.

The monthly income level distribution of the study participants was: 64.9% (268) earned less than five hundred cedis (120 dollars), 14.5% (60) of the participants earned between five hundred to one thousand cedis (120-240 dollars), and those who earned between one thousand to three thousand cedis (240-720 dollars) were only 7.7% (32) while the remaining 12.8% (53) of the participants said they do not earn income.

The predominant ethnic group was Akan, with 181 participants representing 44%, followed by Ga dangme's with 82 participants representing 20%, the Ewe's with 71 participants representing 17%, the Others (made up of different northern descent) with 36 participants representing 9% while the Mole Dagbani's had 30 participants representing 7% and Non-Ghanaians were only 13 representing 3% of the total participants as shown in Table 1.

Table 1: Socio-demographic Characteristics of Study Participants

Characteristics	Frequency (N=413)	Percent (100)%
Age		
18-34yrs	71	17.19
35-50yrs	247	59.81
51-64yrs	85	20.58
65-75yrs	10	2.42
Sex		
Female	305	73.85
Male	108	26.15
Marital Status		
Single	78	18.89
Cohabitating	11	2.66
Married	172	41.65
Divorced	67	16.22
Widowed	85	20.58
Religion		
Christian	367	88.86
Muslim	43	10.41
Traditionalist	3	0.73
Education		
No Formal Education	50	12.11
Primary	64	15.50
Middle/JSS	176	42.62
Secondary/SSS	66	15.98
Tertiary	57	13.80
Employment		
Government worker	21	5.08
Private sector	45	10.90
Self - employed	286	69.25
Unemployed	61	14.77
Monthly income - GHS		
<500	268	64.89
500 – 1000	60	14.53
1000 – 3000	32	7.75
No Income	53	12.83
Ethnicity		
Akan	181	43.83
Ewe	71	17.19
Ga dangme	82	19.85
Mole Dagbani	30	7.26
Non-Ghanaian	13	3.15
Others	36	8.72
Age	Mean = 43.8	SD=10

4.2 Health Facility Utilisation Practices among PLHIV

Majority of the study participants 87% (359) got to know their HIV status the first time as a result of a request by a healthcare professional for an HIV test (retrovirus test); while 13% (54) decided on their own to be tested.

Three hundred seventy-five (91%) of these participants sought for immediate medical care, while thirty-eight (9%) did not seek for immediate medical care. Immediate medical care as defined by this study: is to seek for professional medical care at an accredited health facility within 3months of knowing your HIV positive status. Of the thirty eight that did not seek immediate medical care: majority 76% (29) did not seek for care anywhere, 13% (5) sought for care at herbal centres, and the remaining -9% (4) sought for care at faith (religious) based centres.

In seeking to determine the delay period for seeking care, 40% (15) took more than one year, 13% (5) about a year, 29% (11) about six months and 18% (7) less than six months to seek for immediate medical care.

Majority of the PLHIV's 90% (373) always attends clinic on their respective scheduled days, while the minority 10% (40) do not always attend clinic. Reasons given for not always attending clinic were: due to forgetfulness 47.5% (19); distance 20% (8); 12.5% (5) had no reason while 10% (4) failed to attend scheduled clinic visits for financial and ill-health reasons.

The travel time by vehicle to the fevers unit, KBTH from the respective residences of most 36% (149) participants was one hour, for those who took two hours were 28% (115) and those who took less than 30 minutes were 27% (110) while 9% (39) took the longest hours of more than three hours to arrive at the fevers unit (FU), Korle-Bu teaching hospital. Table 2

Table 2: PLHIV Health Facility Utilisation Practices

Practices	Frequency N	Percent %
HIV test requested		
Yes	359	86.92
No	54	13.08
Immediate medical care		
Yes	375	90.80
No	38	9.20
Place of alternate care		
Faith based centre	4	10.53
Herbal centre	5	13.16
No where	29	76.31
Medical care delay period		
<6months	7	18.42
6months	11	28.95
1yr	5	13.16
>1yr	15	39.47
Clinic attendance always		
Yes	373	90.31
No	40	9.69
Reason not always at clinic		
Distance	8	20
Financial	4	10
Forgetfulness	19	47.5
Unwell	4	10
No reason	5	12.5
Travel time to FU, KBTH		
< 30 minutes	110	26.63
1 hour	149	36.08
2 hours	115	27.85
>3 hours	39	9.44

4.3 Sexual Practices of Sexually Active PLHIV

Out of the 413 study participants 54% (221) reported having had sexual intercourse in the last twelve months; whereas 46% (192) have not had sex. Of the 221 PLHIV's who have had sex, majority 80% (177) used condom during the last time they had sex and the minority 20% (44) didn't use condom the last time they had sex. Most 54% (95) of those who (177) use condom the

last time they had sex, said the decision to use condom was mutual (joint decision), 44% (78) said they decided (myself) to use condom and only 2% (4) said their partner decided to the use of condom. The minority 44 that did not used condom during their last sexual intercourse: most 32% (14) said they (couple) didn't think it was necessary, 27% (12) said their partner objected to the use of condom, about 18% (8) said they did not think of it, and 16% (7) said they don't like condom whereas 7% (3) said they did not used condom because it was not available.

With regards to condom utilisation among the 221 sexually active study participants, a little over half 55% (121) always used condom, those who sometimes used condom were 22% (49) and those who used condom usually were 10% (23) while 9% (19) of the sexually active study participants said they never used condom and paradoxically 4% (9) said they don't know whether they used condom. Table 3 and Figure 1

4.4 PLHIV Treatment Adherence Practices

The four hundred and thirteen persons living with HIV (PLHIV) have been on prophylaxis and ARV treatment spanning different duration. Majority 54% (222) of the PLHIV's have been on treatment more than five years, those who have been on treatment less than a year and a year and half were 19% (77), for the period of two to three years were 18% (75) and those who have been on treatment for the period of four to five years were 9% (39).

Majority 60% (245) of the study participants did not sometimes forget taking their medication whereas minority 40% (167) sometimes forgets taking their medication.

Minority 19% (79) of the study participants did not take their medication for a day or more over the last two weeks' period whereas majority 81% (334) took their medication everyday over the last two weeks.

Table 3: Sexual Practices of Sexually Active PLHIV's

Practices	Frequency N	Percent %
Had sex in the last 12 months		
Yes	221	53.51
No	192	46.49
Use condom in last sex		
Yes	177	80.09
No	44	19.91
Condom use decision		
Joint decision	95	53.67
Myself	78	44.07
Partner	4	2.26
Why didn't use condom		
Didn't think of it	8	18.18
Didn't think it was necessary	14	31.82
Don't like them	7	15.91
Not available	3	6.82
Partner objected	12	27.27
Frequency of condom use		
Always	121	54.75
Usually	23	10.41
Sometimes	49	22.17
Never	19	8.60
Don't Know	9	4.07

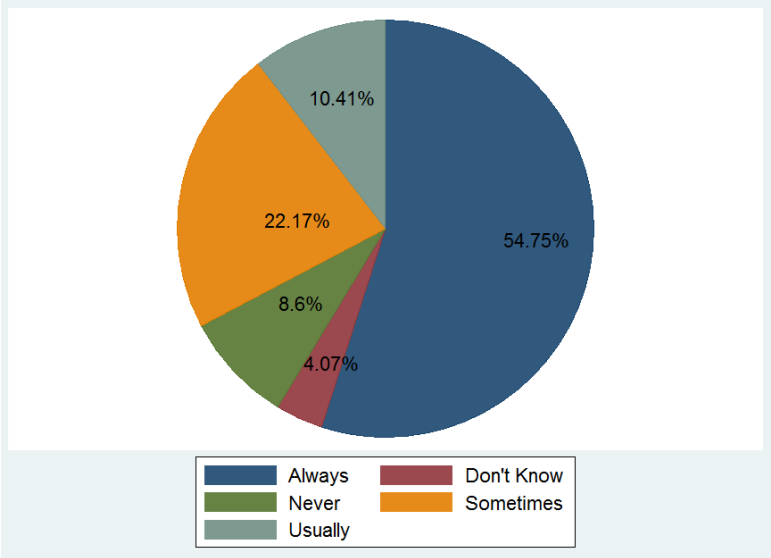


Figure 1: Frequency of Condom Use among Sexually Active Study Participants

Most 90% (372) of the sampled 413 Persons Living with HIV took their prescribed doses of medications the previous day whereas the remaining 41(10%) did not take their medication the previous day.

To assess whether the PLHIV's do stop taking the ARV prescription drug whenever they feel symptoms are under control: majority 79% (325) of the respondents said they don't stop taking while the minority 88 (21%) did stop taking their drugs whenever they felt symptoms were under control.

In addition to the prescribed ARV and prophylaxis treatment: seventy-three (18%) of the respondents said they took medications that were not prescribed, however 82% (340) said they did not take any other medication aside what their medical doctor and pharmacist has prescribed and given to them.

The motivation to adhere to the ARV and prophylaxis treatment schedule: for most of them, it has been for better health, others 11% (46) for strength / vitality, and the remaining 44 (11%) it has been for fear of death or relapse. Table 4

4.5 PLHIV Treatment Adherence Relationship

The result of the logistic regression analysis indicated a significant association between treatment adherence and the respondents who took all their medications a day before the study. Those who took their medications a day before the study were 9.2 times more likely to adhere to treatment compared to those who did not take their medication (p<001 95CI 4.39-19.27)

Study participants who took medications were 0.47 times less likely to adhere to treatment compared to study participants who did not take medications that were not prescribed. (P=0.01 95CI, 0.26 - 0.83) Table 5

Table 4: PLHIV Treatment Adherence Practices

Practices	Frequency N	Percent %
Duration on ARV or prophylaxis		
<=1yr	77	18.64
2 - 3yrs	75	18.16
4 - 5yrs	39	9.44
>5yrs	222	53.75
Forget sometimes to take medications		
Yes	167	40.44
No	245	59.56
Didn't take a day or more over last two weeks		
Yes	79	19.13
No	334	80.87
Took medication previous day		
Yes	372	90.07
No	41	9.93
Feel ok, so sometimes don't take medications		
Yes	88	21.31
No	325	78.69
Takes medications not prescribed		
Yes	73	17.68
No	340	82.32
Motivation for medication adherence		
Better Health	323	78.21
Fear of death or relapse	44	10.65
Strength / Vitality	46	11.14

Table 5: Treatment Adherence of PLHIV

Variable	Category	Number (%)	Adherence To Treatment			
			Yes (%)	No (%)	OR (95%CI)	P-value
Took all medication previous day	No	41(9.93)	25(31.65)	16(4.79)	1	-
	Yes	372(90.07)	54(68.35)	318(95.21)	9.2(4.39-19.27)	<.001
Duration on ARV / Prophylaxis (**medication**)	< = 1Yr	77(18.64)	15(18.99)	62(1856)		0.254
	2-3Yrs	75(18.16)	12(15.19)	63(18.86)		
	4-5Yrs	39(9.44)	12(15.19)	27(8.08)		
	>5yrs	222(53.75)	40(50.63)	182(54.49)		
Regular clinic attendance	No	40(9.69)	7(8.86)	33(9.88)		0.783
	Yes	373(90.31)	72(91.14)	301(90.12)		
Sometimes stop medication when you feel ok	No	325(78.69)	55(69.62)	270(80.84)		0.05
	Yes	88(21.31)	24(30.38)	64(19.16)		
Taken medication not prescribed	No	340(82.32)	57(72.15)	283(84.73)	1	-
	Yes	73(17.68)	22(27.85)	51(15.27)	0.47(0.26-0.83)	0.01
Motivation for medication adherence	Fear of Death	44(10.65)	8(10.13)	36(10.78)	1.05(0.46-2.37)	0.91
	Better Health	323(78.21)	61(77.22)	262(78.44)	1	-
	Strength/Vitality	46(11.14)	10(12.66)	36(10.78)	0.84(0.39-1.78)	0.65

4.6: Treatment Adherence and Demographic Characteristics

The result did not indicate statistically significant association between treatment adherence and demography of study participants. Table 6

Table 6: Treatment Adherence and Demographic Characteristics

Variable	Category	Number (%)	Adherence To Treatment			
			Yes (%)	No (%)	OR (95%CI)	P-value
Marital Status	Single	78(18.89)	20(25.32)	58(17.37)		0.59
	Cohabitating	11(2.66)	2(2.53)	9(2.69)	1	-
	Married	172(41.65)	26(32.91)	146(43.71)	1.24(0.25-6.14)	0.78
	Divorce	67(16.22)	23(29.11)	44(13.17)	0.43(0.08-2.18)	0.29
	Widowed	85(20.58)	8(10.13)	77(23.05)	2.14(0.39-11.85)	0.37
Religion	Christian	367(88.86)	70(88.61)	297(88.92)		0.67
	Muslim	43(10.41)	9(11.39)	34(10.18)		
	Traditionalist	3(0.730	0	3 (0.90)		
Ethnicity	Akan	181(43.83)	33(4177)	148(44.31)		0.598
	Ewe	71(17.19)	10(12.66)	61(18.26)		
	Ga Dangme	82(19.85)	17(21.52)	65(19.46)		
	Mole Dagbani	30(7.15)	7(8.86)	23(6.89)		
	Non-Ghanaian	13(3.15)	2(2.53)	11(3.29)		
	Other	36(8.72)	10(12.66)	26 (7.78)		
Employment Status	Unemployed	61(14.77)	13(16.46)	8(14.37)		0.447
	Self-Employed	286(69.25)	58(73.42)	228(68.26)		
	Govt. Worker	21(5.08)	2(2.53)	19(5.69)		
	Private Worker	45(10.90)	6(7.59)	39(11.68)		
Monthly Income	No income	53(12.83)	9(11.39)	44(13.17)		
	<500	268(64.89)	57(72.15)	211(63.17)		
	500-1000	60(14.53)	9(11.39)	51(15.27)		
	1000-3000	32(7.75)	4(5.06)	28 (8.38)		
Educational Level	No education	50(12.11)	6(7.59)	44(13.17)		
	Low	240(58.11)	50(63.29)	190(56.89)		0.349
	High	123(29.78	23(29.11)	100(29.94)		

4.7 Assessment of Knowledge, Attitudes and Practices

The Study participant indicated a high level of understanding of HIV. Majority 329 (79.7) of the study participants scored high mark (5-8 out of 8) while 20.3% (84) scored low mark (0-4 out of 8). Figure 2 and Table 7

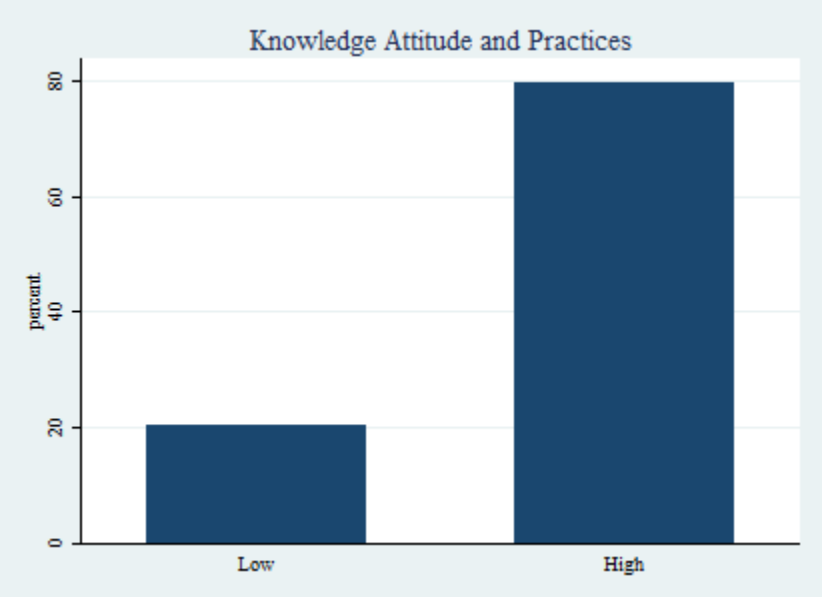


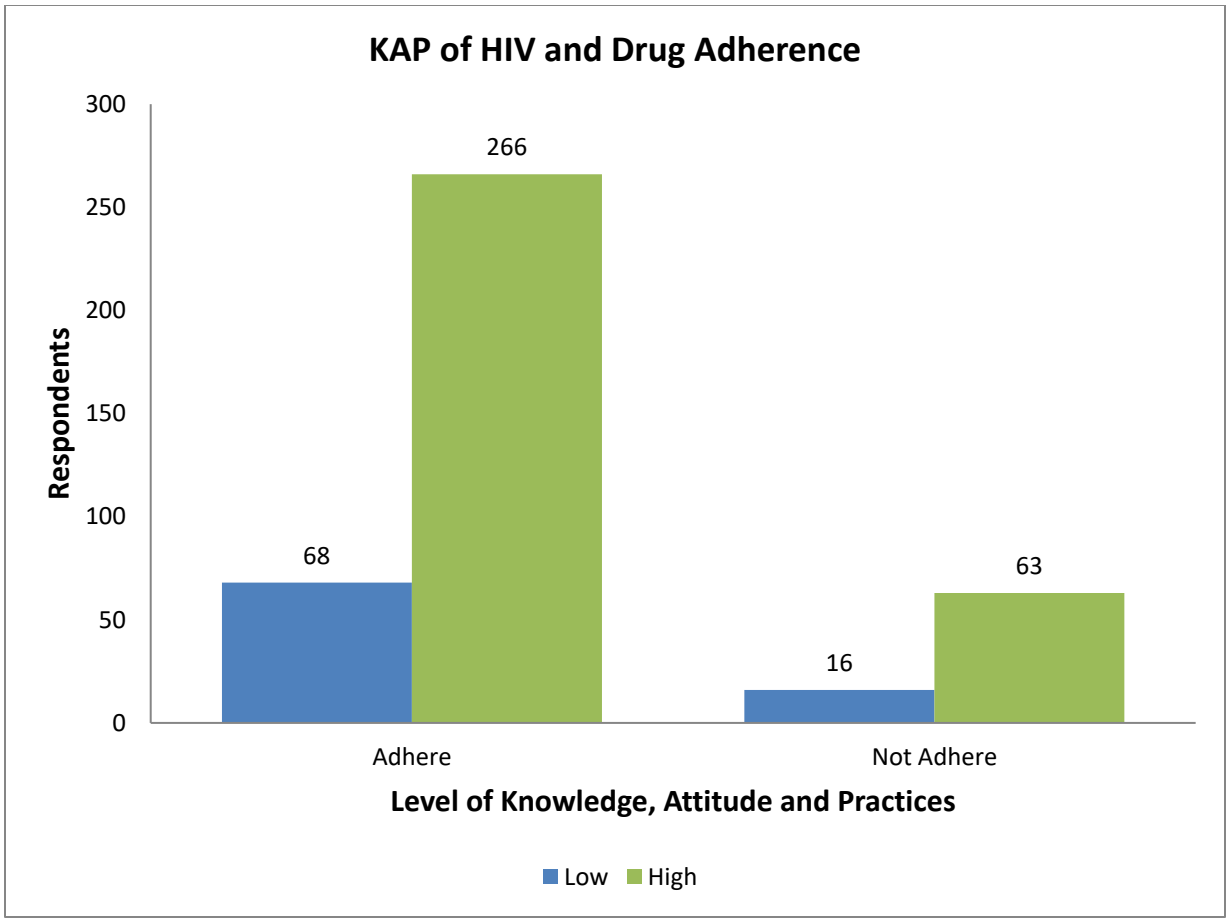
Figure 2: Participant Score of KAP

Table 7: Knowledge, Attitudes and Practices

Knowledge, attitudes and practices questions	Yes N (%)	No N (%)	Don't Know N (%)
Can regular and correct use of condom during sex protect people from the virus	356(86.20)	24(5.81)	33(7.99)
Having one uninfected faithful sex partner, protect people from the virus	294(71.19)	91(22.03)	28(6.78)
Can someone get the virus by sharing meal with an infected person	13 (3.15)	387(93.70)	13(3.15)
Can person get the virus by getting injection with a needle that someone has used	381(92.25)	17(4.12)	15(3.63)
Can a pregnant woman living with HIV transmit the virus to the unborn child	252(61.02)	126(30.51)	35(8.47)
Can woman living with HIV transmit the virus to her new born child through breastfeeding	264(63.92)	96(23.24)	53(12.83)
Is having HIV, same as having other disease conditions such as Hypertension, Diabetes, Cancer	54(13.08)	306(74.09)	53(12.83)

4.8 Drug adherence and Knowledge, Attitude and Practices

Majority (266 out 329) of the study participants who scored high marks adhered to drugs (ARV) treatment while minority 63 did not adhere; however, 68 out of the 84 study participants who scored low marks adhered to the ARV drug treatment. Figure 3



	Adhere	Not Adhere	Total
Low	68	16	84
High	266	63	329

Figure 3: KAP Score and Drug Adherence

4.9 Stigma and Health Seeking Behaviour

The results did not show significant association between drug adherence and stigma (p=0.24 95 CI 0.81-2.36). However, there was an association between age and stigma: those in age group (35 -50yrs) were 2 times more likely to be stigmatised compared to those in age group 18-34yrs. (P=0.04 95CI 1.02-4.01) Table 8

Table 8: Health Seeking Behaviour and Enacted Stigma

Variable	Category	Number (%)	Stigma			
			Yes (%)	No (%)	OR (95%CI)	P-value
Age	18-34yrs	71(17.19)	12(11.01)	59(19.41)	1	-
	35-50yrs	247(59.81)	72(66.06)	175(57.57)	2.02(1.02-4.01)	0.04
	51-64yrs	85(20.58)	22(20.18)	63(20.72)	1.72(0.78-3.80)	0.18
	65-75yrs	10(2.42)	3(2.75)	7(2.3)	2.10(0.47-9.51)	0.32
Drug Adherence	Yes	79(19.13)	25(22.94)	54(17.76)	1.38(0.81-2.36)	0.24
	No	334(80.87)	84(77.06)	250(82.24)	1	-
Regular clinic Attendance	Yes	373(90.31)	95(87.16)	278(91.45)	0.63(0.32-1.27)	0.19
	No	40(9.69)	14(12.84)	26(8.55)	1	-

4.10 Facility Based Stigma and Drug Adherence

Majority 256 (76.7%) of the study participants who feel safe from discrimination at the Fevers Unit did adhere to drug treatment. Majority 353 (85.5%) of the study participants who don't feel discriminated against by health workers took their drugs. Majority 287 (85.9%) of the study participants who trust health workers did not miss taking their drugs.

Age of study participants was not a factor in drug or treatment adherence and there was no statistical significance of association between drug adherence and facility based stigma. Table 9

Table 9: Facility Based Stigma and Drug Adherence

Variable	Category	Number (%)	Drug Adherence			
			Yes (%)	No (%)	OR (95%CI)	P-value
Age	18-34yrs	71(17.19)	17(21.52)	54(16.17)	1	-
	35-50yrs	247(59.81)	45(56.96)	202(60.48)	0.71(0.37-1.34)	0.28
	51-64yrs	85(20.58)	15(18.99)	70(20.96)	0.68(0.31-1.49)	0.33
	65-75yrs	10(2.42)	2(2.53)	8(2.4)	0.79(0.15-4.15)	0.78
Feel safe from discrimination at fevers unit	Yes	315(76.27)	59(74.68)	256(76.65)	1.84(0.23-15.09)	0.56
	No	89(21.55)	19(24.05)	70(20.96)	2.17(0.25-18.76)	0.47
	Don't Know	9(2.18)	1(1.27)	8(2.4)	1	-
Discriminated against by health worker	Yes	60(14.53)	15(18.99)	45(13.47)	1.51(0.79-2.87)	0.21
	No	353(85.47)	64(81.01)	289(86.53)	1	-
Trust health workers	Yes	358(86.68)	71(89.87)	287(85.93)	1.029(0.18-5.89)	0.97
	No	41(9.93)	6(7.59)	35(10.48)	1.48(0.32-6.80)	0.61
	Don't Know	14(3.39)	2(2.53)	12(3.59)	1	-

4.11 Facility Based Stigma and Regular Clinic Attendance

Majority 286 (76.8%) of the study participants who feel safe from discrimination at the FU attended scheduled clinic regularly. Also, majority 317 about (85%) of the study participants who don't feel discriminated against by health workers attended clinic regularly. Table 10

Table 10: Facility Based Stigma and Regular Clinic Attendance

Variable	Category	Number (%)	Clinic Attendance			
			Yes (%)	No (%)	OR (95%CI)	P-value
Age	18-34	71(17.19)	67(17.96)	4(10)	1	-
	35-50	247(59.81)	218(58.45)	29(72.50)	0.45(0.15-1.33)	0.14
	51-64	85(20.58)	78(20.91)	7(17.50)	0.67(0.19-2.39)	0.53
	65-75	10(2.42)	10(2.68)	-	0.44	-
Feel safe from discrimination at fevers unit	Yes	315(76.27)	286(76.80	29(72.5)	2.82(0.56-14.30)	0.19
	No	89(21.55)	80(21.45)	9(22.5)	2.54(0.45-14.40)	0.28
	Don't Know	9(2.18)	7(1.77)	2(5.0)	1	-
Discriminated against by health worker	Yes	60(14.53)	56(15.01)	4(10)	1.59(0.54-4.65)	0.39
	No	353(85.47)	317(84.99)	36(90)	1	-
Trust health workers	Yes	358(86.68)	322(86.33)	36(90)	-	0.21
	No	41 (9.93)	37 (9.92)	4(10)	-	0.23
	Don't Know	14 (3.39)	-	-	-	-

CHAPTER FIVE

DISCUSSION

5.0 Discussions

This study set out to explore and describe the health seeking behaviour of persons living with HIV and attendant impact of stigma on health seeking behaviour.

A high level of HIV care uptake was observed. About 91% of the study participants sought for immediate care (not more than 3months) after testing positive or knowledge of HIV+ status with about 90% of regular clinic attendance.

Adherence to ARV treatment was about 90% and indicated significant association (p<001 95CI 4.39-19.27) with participants who took their medication the previous day are 9.2 times more likely to adhere to treatment. Levi-Minzi et al 2014 reported about 95% ARV adherence by 54.1% of the HIV+ persons and substance abusers in South Florida. The Florida population reported high level of adherence with lower level of stigma. This confirms the low level of enacted stigma among the study participants, may be linked to non-disclosure of status and the accompanied healthy physical look which is not synonymous with what the general population knew about HIV+ persons two decades ago. Majority 287 (85.9%) of the study participants who trust health workers did not miss taking their drugs.

The high level of motivation to adhere to the ARV treatment is borne out of the desire to have "better health" reason mostly provided by 78.2% (323) of participants, as their motivation for the sustained practice of taking their daily dose(s). This finding does not support the observation by Rahmati-Najarkolaei et al 2010 of "diminished motivation" to remain healthy, due to stigma (internalized or enacted), causing delay in care seeking. However, the findings of McCoy that age is significantly associated with stigma among those below <50yrs (Mccoy et al. 2016)

confirms the findings of this study; the high level of stigma among the age group 35-50yrs who are 2 times more likely to be stigmatised compared to those in age group 18-34yrs. (P=0.04 95CI 1.02-4.01)

HIV related stigma is reported globally as adversely affecting health seeking behaviours of PLHIV's. Rahmati-Najarkolaei et al 2010 reported that almost all study participants recounted experiencing stigma and discrimination by health care workers at the HIV care clinic in Tehran (Rahmati-najarkolaei et al. 2010). This obviously does not corroborate the findings of this study at the Fevers Unit, KBTH Accra. Majority (about 85%) of the study participants who did not experience discrimination from health workers attended clinic regularly. Also Majority 76.8% (286) of the study participants who feel safe from discrimination at the FU attended scheduled clinics regularly. Dako-Gyeke et al confirm that PLHIV who accessed care at the fevers unit Korle-bu didn't experience stigma and discrimination.

The challenges associated with adhering to ARV treatment, particularly difficulty of "swallowing pills" as reported by Mahajan et al is certainly not the challenge for the study participants.(Mahajan et al. 2010) However, one challenge identified in this study relative to drug adherence is forgetfulness. Though the participants who sometimes forget to take their medication are in the minority, thus about 40% is quite huge and should be a source of concern. Ankrah et al 2016 identified same as a key challenge to ARV drug adherence among a younger population (adolescents) in Ghana (Ankrah et al. 2016). Mahajan et al 2008, propose the empowerment of PLHIV's and encourage them to disclose their status to family or trusted friends. The role of relations, such as friends and family members to serve as support and monitors to ensure PLHIV's adhere to treatment protocols is critical to the success of the HIV response. With the ambitious target of zero new infection, there must be no tolerance for

behaviours such as forgetfulness to serve as barriers to treatment adherence and regular clinic attendance, as revealed in the findings of this study. About 19 (48%) of the 40 PLHIV's who were unable to attend clinic always attributed it to same.

A little over half of the study participants, 54% (221) were sexually active: have engaged in sexual intercourse over the past 12months relative to the time of the study. Majority 80% (117) of those sexually active (221) have used condom. The decision to used condom largely has been mutual; 54% and 44% representing joint decision and self.

CHAPTER SIX

6.0 CONCLUSION AND RECCOMENDATIONS

6.1 Conclusion

The consequence and impact of HIV is beyond health: the socio-cultural and economic impact cannot be overlooked. The scare HIV brings to individuals, families and communities and the corresponding remedial behaviour is not the same. The causative and remedial knowledge gap of HIV in various communities, including the scientific community has changed progressively. Consequently, perceptions and attitudes have seen remarkable change resulting in positive health seeking behavior of persons living with HIV at the fevers unit.

The logistic regression analysis indicated a significant correlation between treatment adherence and the respondents who took all their medications a day before the study, and were 9.2 times more likely to adhere to treatment compared to those who did not take their medication ($p<.001$ 95CI 4.39-19.27)

Study participants who took medications that were not prescribed showed significant correlation with treatment adherence, and were 0.47 times less likely to adhere to treatment compared to study participants who did not take medications that were not prescribed. (P=0.01 95CI, 0.26 - 0.83)

High level of stigma was observed among the 35-50yrs age group. PLHIV's in age group 35 - 50yrs are 2 times more likely to be stigmatised compared to those in age group 18-34yrs. (P=0.04 95CI 1.02-4.01)

Eighty five (85%) percent of the study participants who don't feel discriminated against by health workers attended clinic regularly.

There is high level of condom utilisation among sexually active PLHIV's. About 55% of sexual active PLHIV use condoms always while 10% and 22% use condom usually and sometimes respectively.

Generally, there is positive health seeking behaviour among PLHIV: regular clinic attendance, ARV treatment, responsible sexual behaviour and high level of knowledge about HIV.

6.2 Recommendations

National Government

1. Government should promote an HIV stigma free society as a vehicle that would ensure reduction of HIV transmission vertically and horizontally.
2. Government should adopt a multi sectorial approach in dealing with the issue of HIV related stigma by engaging key stakeholders in the HIV response, and traditional leaders, religious leaders, corporate leaders to deliberate on workable strategies to reduce stigma.

Health sector stakeholders

1. To achieve the 90-90-90 agenda, there is the need to adopt proactive and human centered policies that would ensure the realisation of zero new infection. Increase test and treat sensitisation activities and introduce mandatory OPD testing.
2. Explore possibility of the use of ICT tools to help solve the challenge of forgetfulness relative to ARV treatment adherence and clinic attendance.

Academia or Scientific community

1. Further research should be carried out to uncover the various factors that inform the health seeking behaviour of PLHIV; a qualitative study in order to delve deeper into the factors influencing the behaviours of PLHIV

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APPENDICES

APPENDIX A

ENSIGN COLLEGE OF PUBLIC HEALTH – KPONG EASTERN REGION

QUESTIONNAIRE

HEALTH SEEKING BEHAVIOURS OF PERSONS LIVING WITH HIV/AIDS: A STUDY AT KORLE-BU TEACHING HOSPITAL (KBTH), ACCRA - GHANA.

INSTRUCTIONS: *Select your answer(s) from the options given by ticking. Where there are no options, please provide the answer(s).*

ELIGIBILITY: MUST BE 18 YEARS AND ABOVE, DIAGNOSED NOT LESS THAN 1 YEAR FROM THIS STUDY

Participant ID Number: …… **Date of Interview (dd/mm/yy): _ _ /_ _ /_ _**

Name of Interviewer: ……

A. SOCIODEMOGRAPHIC DATA

NO.	QUESTIONS	RESPONSE	CODE
1	Gender	1. Male [ ] 2. Female [ ]	A1
2	Age	[ ] years	A2
3	Place of Residence	……	A3
4	Marital Status	1.Married [ ] 2.Single [ ] 3.Widowed [ ] 4.Divorced [ ] 5. Cohabitating [ ] → **B1** Other (specify) ……	A4
5	Ethnicity	1. Akan [ ] 4. Guan [ ] 2. Ga/Dangme [ ] 5. Grusi [ ]	A5

		3. Ewe [ ] 6. Mole Dagbani [ ] 4. Mande[ ] 7. Non-Ghanaian [ ]	
6	Religion	1.Christian [ ] 2.Muslim [ ] 3.Traditionalist [ ] 4.0ther(specify) ----------	A6
7	Level Of Education	1. Primary [ ] 2. Middle/JSS [ ] 3. Secondary/SSS [ ] 4. Tertiary [ ] 5. No Education [ ]	A7
8	Employment status	1. Unemployed [ ] 2. Self - employed [ ] 3. Government Worker 4. Private sector	A8
9	Monthly Income	[ ] < GHS 500 [ ] GHS 500 – 1000 [ ] GHS 1000 – 3000 [ ] > GHS 3000	A9
10	Number of Children and other dependants under 18 years	None [ ] One [ ] Two [ ] Three [ ] Four [ ] Five [ ] Other (specify) [ ] ----------	A10
11	Children's Age	1st ------ 2nd ----- 3rd ------ 4th ------- 5th ------- 6th ---------	A11
12	How many of the indicated children/dependent lives with you?		A12

B. MARRIAGE AND LIVE-IN PARTNERSHIPS

No.	QUESTIONS	RESPONSE	DEFINITION/ EXPLANATION	CODE
13	Have you *ever* been married?	1. YES [ ] → **B2** 2. NO [ ]		B1
14	How old were you when you first married?	[ ] Age in years	This question seeks to know the respondents age at the time of marriage	B2
15	Are you currently married or living with a partner with whom you have a sexual relationship?	**1**. Currently married, living with spouse → **B6** **2**. Currently married, living with other sexual partner [ ] → **B6** 3. Currently married, not living with spouse or any other sexual partner [ ] **4**. Not married, living with sexual partner [ ] **5**. Not married, not living with sexual partner	This question seeks to know the marital status or sexual relationship of respondent	B3
16	At what age did you first have sexual intercourse?	[ ] Age in years	This question is straight forward	B4
17	Have you had sexual intercourse in the last 12 months?	1. Yes [ ] 2. No [ ]		B5

18	The last time you had sex with a regular partner; did you and your partner use a condom?	1. Yes [ ] 2. No [ ] → **B8** 3. Don't Remember [ ]		B6
19	Who suggested using a condom at that time?	1. Myself [ ] 2. My partner [ ] 3. Joint decision [ ]		B7
20	Why didn't you and your partner use a condom that time? **Circle One!**	**Y N** Not available 1 2 Too expensive 1 2 Partner objected 1 2 Don't like them 1 2 Used other contraceptive 1 2 Didn't think it was necessary 1 2 Didn't think of it 1 2 Other ……		B8
21	In general, with what *frequency* did you and your regular partner(s) use condom during the past 12 months?	**1**. ALWAYS [ ] **2**. USUALLY [ ] **3**. SOMETIMES [ ] **4**. NEVER [ ] **5**. DON'T KNOW [ ]	The purpose of this question is to know the rate of condom use during the past year between respondent and regular partner (s)	B9

C. HEALTH SEEKING PRACTICES

22	Which year specifically did you hear of HIV or the disease AIDS?	[/ /] d m y	Respondent should at least state the specific year	C1
23	When did you test positive?	[/ /] d m y	Respondent should at least state the specific year	C2
24	Where (facility) did you test positive? [***indicate name & location***]	[ ]	This question is Straight forward	C3
25	Were you asked by a health professional to get tested?	1. Yes [ ] 2. No [ ]		C4
26	Did you **immediately** seek for professional medical care when you tested positive?	1. Yes [ ] 2. No [ ] →**C6 & 7** 3. Don't Remember [ ]		C5
27	If no, where did you seek help from	1. Faith based centre [ ] 2. Herbal centre [ ] 3. Nowhere [ ]	This question seeks to find out respondents first point of seeking health care	C6
28	If no, How long did it take you before seeking for professional medical care	1. 6 months [ ] 2. 1yr [ ] 3. 2yrs [ ] 4. others specify [ ]	This question seeks to establish period between testing positive and commencing professional HC	C7

29	Was the Fevers Unit the first point (place) in seeking for professional medical care?	1. Yes [ ] 2. No [ ] →**C9**	This question seeks to find out if respondents first point of professional help was the Fevers Unit, Korle-bu	C8
30	If no, where or which facility?		***Respondent should indicate name & location.***	C9
31	How much time does it take to travel by vehicle (public transport) to the facility from your residence at the time?	1. < 30 minutes [ ] 2. 1 hour [ ] 3. 2 hours [ ] 4. 3 hours + [ ] 5. Walking distance [ ]	Seeks to establish distance from that facility to respondent's **residence at the time.**	C10
32	Why are you no longer going to that facility? ***[the above facility]*** *[**1**. Far; **2.** client service; **3.** Competence/stigma; **4.** Drugs unavailable]*	1. Distance [ ] 2. Poor service [ ] 3. Lack of Trust [ ] 4. No Drugs [ ] 5. Other..... [ ]	Seeks to establish reason for change of facility.	C11
33	How long have you been attending clinic at the Fevers Unit?	1. > 1 year [ ] 2. 2 - 3 years [ ] 3. 4 – 5 years [ ] 4. 5 years + [ ]	Seeks to establish **how many years** respondent has been attending clinic **at Fevers Unit, Korle-bu**	C12
34	How much time does it take to travel by vehicle (public transport) to the Fevers Unit from your residence	1. < 30 minutes [ ] 2. 1 hour [ ] 3. 2 hours [ ] 4. 3 hours + [ ] 5. Walking distance [ ]	Seeks to establish **distance (also Cost**) from Fevers Unit to respondent's **current residence.**	C13
35	Do you always come on your clinic days?	1. Yes [ ] 2. No [ ] →**C15**		C14
	If no, why are you not able to	1. Distance [ ]		

36	come always on your clinic days	2. Forgetfulness [ ] 3. Financial [ ] 4. Unwell [ ] 5. No reason [ ]		C15

D. ADHERENCE TO TREATMENT

37	How long have you been on antiretroviral (ARV) treatment?	1. > 1 year [ ] 2. 2 - 3 years [ ] 3. 4 – 5 years [ ] 4. 5 years + [ ]		D1
38	Do you sometimes forget to take your medicines (ARVS)	1. Yes [ ] 2. No [ ]		D2
39	People sometimes miss taking medication other than forgetting. Over the past 2 weeks, was there a day(s) you didn't take your medicines (ARVS)	1. Yes [ ] 2. No [ ]		D3
40	Did you take all your medicines (ARVS) yesterday?	1. Yes [ ] 2. No [ ]		D4
41	When you feel your symptoms are under control, do you sometimes stop taking your medicines (ARVS)?	1. Yes [ ] 2. No [ ]		D5
42	Do you take other medicines that are not prescribed by your doctor in addition to your ARVS?	1. Yes [ ] 2. No [ ]		D6
43	What keeps you motivated to take the (ARVS)?	1. Better Health [ ] 2. Fear of death or relapse[ ] 3. Strength / Vitality [ ] 4. Improved dermatology [ ]		D7

E. KNOWLEDGE, ATTITUDES, AND PERCEPTIONS

44	Can people protect themselves from the HIV virus by using a condom correctly every time they have sex?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	Seeks to find out if the respondent thinks people can protect themselves from regular and correct use of condom whenever they have sex	E1
45	Can people protect themselves from the HIV virus by having one uninfected faithful sex partner?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	This question is to find out if the participant thinks people protect themselves from the HIV virus by keeping to faithful partner	E2

			who does not have the HIV virus	
46	Can a person get the HIV virus by sharing a meal with someone who is infected?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	This question is straight forward	E3
47	Can a person get the HIV virus by getting injections with a needle that was already used by someone else?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	This question is straight forward	E4
48	Can a pregnant woman infected with HIV or AIDS transmit the virus to her unborn child?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	This question s is to find out if the respondent believes a pregnant women can pass on HIV to her unborn child	E5
49	Is having HIV, as same as having other disease conditions such as Hypertension, Diabetes, Cancer?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]		E6

50	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child?	1. Go to the hospital [ ] 2.Take ARV treatment [ ] 3. Not breastfeed the child [ ] 4. Breastfeed the child [ ] 5. Deliver in health facility [ ] 6. Other (specify)……..	Finding out what specifically can a woman do to reduce the risk of passing on HIV to her unborn child? Also if respondent is aware of medication that can be given during pregnancy or delivery	E7
51	Can a woman with HIV or AIDS transmit the virus to her new-born child through breastfeeding?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	This is to find out whether respondents are aware that a mother can pass on the virus to her new-born child through breastfeeding	E8

F. STIGMA AND DISCRIMINATION

52	Does your spouse or partner know your status?	1. Yes [ ] →**F2** 2. No [ ] →**F4** 3. Don't Know [ ] →**F4**		F1
53	How did your spouse or partner get to know your status?	1. Self-disclosure [ ] 2. During counselling [ ] 3. Other specify……..		F2

54	Is your spouse or partner HIV positive?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]		F3
55	Why is your spouse or partner not aware of your status?	1. Fear of stigma [ ] 2. Losing relationship [ ] 3. Other specify……..		F4
56	If a member of your family became ill with HIV, the virus that causes AIDS, would you want it to remain secret?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]	This question is straight forward	F5
57	Have you been discriminated against because of your status	1. Yes [ ] 2. No [ ]		F6
57**(b)**	If no, why?	1. I relate to people nicely [ ] 2. People don't know my status [ ] 3. No idea [ ]		
58	Was it difficult finding or deciding on who to accompany you to clinic for your first line ARVS?	1. Yes [ ] 2. No [ ]	Seeks to establish how difficult it was **finding a monitor** for ARVS administration	F7
59	Are you sometimes unable to take your ARVS at the prescribed time due to the environment and people around?	1. Yes [ ] 2. No [ ]	Seeks to establish how fear of stigma **affects** ARVS administration.	F8
60	Do you trust the health care workers	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]		F9

61	Do you feel discriminated against by health workers	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]		F10
62	Are you seeking care at this facility because you feel safe from discrimination?	1. Yes [ ] 2. No [ ] 3. Don't Know [ ]		F11
63	Do you know someone in the past year that has had the following happen to them because of HIV or AIDS? *READ OUT:* *MORE THAN ONE ANSWER IS POSSIBLE.*	Excluded from social gathering Lost customers to buy their produce/ good or lost a job Had property taken away Abandoned by their spouse /partner Abandoned by their family/sent away to the village Teased or sworn at Lost respect/standing within the family and/or community	Finding out if the respondent is aware of someone in the previous year who has been excluded from social gathering, lost customers to buy their products, lost a job, abandoned by family members, teased or sworn at and other	F12

		Gossiped about	discriminatory attitude towards them because he/she has HIV/AIDS	