“FEEL AT HOME”: LITERATURE REVIEW OF THE FACTORS INFLUENCING ACCESS TO HIV PREVENTIVE SERVICES AMONG YOUNG PEOPLE IN GHANA.

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“FEEL AT HOME”: LITERATURE REVIEW OF THE FACTORS INFLUENCING ACCESS TO HIV PREVENTIVE SERVICES AMONG YOUNG PEOPLE IN GHANA.

A thesis submitted in partial fulfilment of the requirement for the award of a degree in Master of Science (Public Health)

By

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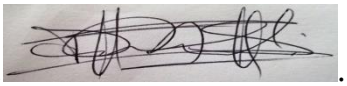
Declaration:

Where other people’s work has been used (either from printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis “Feel at home: Literature review of the factors influencing access to HIV preventive services among young people in Ghana.

Signature: …  ...

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DEDICATION

To Dr (Mrs) Victoria Nyarkoah Sam-Abaidoo, Nana Kwame Abaidoo and Mr Charles Ampong Adjei

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To the almighty God who has been my source of hope and strength in life, I say, glory is to his name.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral therapy
BCC	Behaviour change communication
CHAG	Christian Health Association of Ghana
DHS	Demographic health survey
FHI	Family Health International
GAC	Ghana AIDS Commission
GDP	Gross domestic product
GLSS	Ghana living standard survey
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
HPS	HIV preventive services
HTC	HIV testing and counselling
NGOs	Non-Governmental Organisations
PEP	Post–exposure prophylaxis
PPAG	Planned Parenthood Association of Ghana
PrEP	Pre-exposure prophylaxis
SHARPER	Strengthening HIV and AIDS response partnership with evidence-based results
STI	Sexually transmitted infections
UNAIDS	United Nation Programme on HIV and AIDS
WHO	World Health Organisation
YP	Young people
RFSU	Riksförbundet För Sexuell Upplysning
MSI	Marie Stopes International

GLOSSARY

Access

Access to health care services is defined as "the opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use health care services and to actually have the need for services fulfilled" (Levesque et al. 2013 pp. 4).

Behaviour change communication (BCC) in HIV and AIDS

BCC has been defined as "an approach used to support individuals' ability to adopt and maintain a new positive behaviour. The main aim is to increase knowledge, stimulate dialogue and ensure that people are given accurate and timely information about HIV and AIDS in their preferred language or medium" (Wangulu 2008 pp. 1).

Comprehensive HIV and AIDS knowledge

It is defined as " knowing that consistent use of condom during sexual intercourse and having just one HIV-negative and faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about HIV/AIDS transmission or prevention" (Ghana Statistical Service [GSS] 2015a pp. 211).

HIV preventive services

For the purpose of this thesis, I define HIV preventive services as HIV testing and counselling, diagnosis and treatment of sexually transmitted infections, provision and use of male and female condoms.

SHARPER programme

SHARPER programme is programme designed to address the needs of people living with HIV and their partners, sex workers and men who have sex with men in Ghana by Family Health International (FHI) with funding from the US Agency for International Development (USAID).

Young people (YP)

Young people is defined as male and females between the ages of 10 to 24 years (United Nations Joint Programme on HIV and AIDS [UNAIDS] 2014b).

ABSTRACT

Background

Young people have limited access to sexual and reproductive health service including HIV prevention services in Ghana (Ghana Health Service [GHS] 2016a). Identifying the factors that influence access to HIV preventive service in health facilities among young people is an important effort to contribute to reduction of HIV infection by 90% by the year 2020. Evidence of these factors influencing accessibility to HIV preventive services remains fragmented. The study therefore seeks to conceptually review exiting literature that explored factors influencing accessibility to HIV preventive services in Ghana.

Methodology

The study is a literature review and a desk study. Published literatures in English from the year 2007 to 2017 were included in the study. However, literature that were older and very important to the research were included due to paucity of literature on young people in Ghana. The access model by Levesque et al. (2013) was used to present and analyse the study.

Results

The factors that influenced accessibility to HPS services among young people included health literacy, confidentiality, hours of opening, "culture of silence" about sex in the society, attitudes of health workers, technical, interpersonal quality of HPS and others.

Conclusion and recommendations

Access to HIV preventive services is low and interventions that have proven effective in addressing access must be intensified and expanded. Continuous education of healthcare workers adolescent friendly services, community engagement to encourage discussion of SRHS issues and removal of legal restrictions affecting access to HIV preventive services should be considered.

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Key words: HIV, AIDS, young people, service access.

Word count: 12,007

INTRODUCTION

HIV was first diagnosed in Ghana in 1986. Since then, HIV has spread and it is now described as a low generalised epidemic in Ghana with an estimated prevalence of 2.0 % among the general population (Ghana Statistical Service [GSS] 2015a). The 2016 HIV sentinel survey report estimated the prevalence among young people (15-24 years) as 1.1%, the same as in 2015 (Ghana AIDS Commission [GAC] 2017). Although this is low compared to some countries in sub-Saharan Africa, the burden of a single case of HIV cannot be overemphasised. The transmission of HIV in Ghana is mainly through heterosexual contact with an infected person (GSS 2015a). Strategies used in the fight against HIV in Ghana to date have included behaviour change communication (BCC), HIV testing and counselling (HTC), male circumcision, prevention and treatment of sexually transmitted infections (STI), post–exposure prophylaxis (PEP), and pre-exposure prophylaxis (PrEP) (GAC 2013). According to Ghana's National HIV and AIDS report (2013), one determinant of the spread of HIV in Ghana is the limited access to HIV prevention services among vulnerable people including young people to access HIV prevention services.

The selection of this thesis topic is due to my personal interest in the well-being of young people and related to my involvement in the Family Health International (FHI) SHARPER programme which core activities are geared towards improving the knowledge, attitudes and practice key populations. In addition, my professional training as a nurse and HIV counsellor has given me the opportunity to appreciate the challenges young people face with regards to their sexual and reproductive health including HIV and AIDS in terms of obtaining appropriate information and access to services.

Young people have limited access to HIV prevention services in Ghana (GHS 2016a). The focus of this study is therefore on health service interventions for HIV prevention. Knowledge of the influencing factors will help to develop strategies to improve access to HIV preventive services in Ghana. This will assist the health sector to improve access to HIV preventive services (HPS) and achieve the international target to reduce new infections by 90% by 2030 globally compared to year 2010 (UNAIDS 2014a).

The thesis is organised in six chapters. The first chapter gives a brief description of the relevant background issues as pertains to Ghana. The second chapter presents the problem statement, justification, objectives of the study, methodology including the search method, and conceptual framework. Chapter three describes the findings of the literature review regarding the factors influencing accessibility to HPS. The next chapter presents the findings on evidence-based interventions. Chapter five discusses the findings of the study. The final chapter six offers conclusion and recommendations.

CHAPTER ONE: BACKGROUND INFORMATION OF GHANA

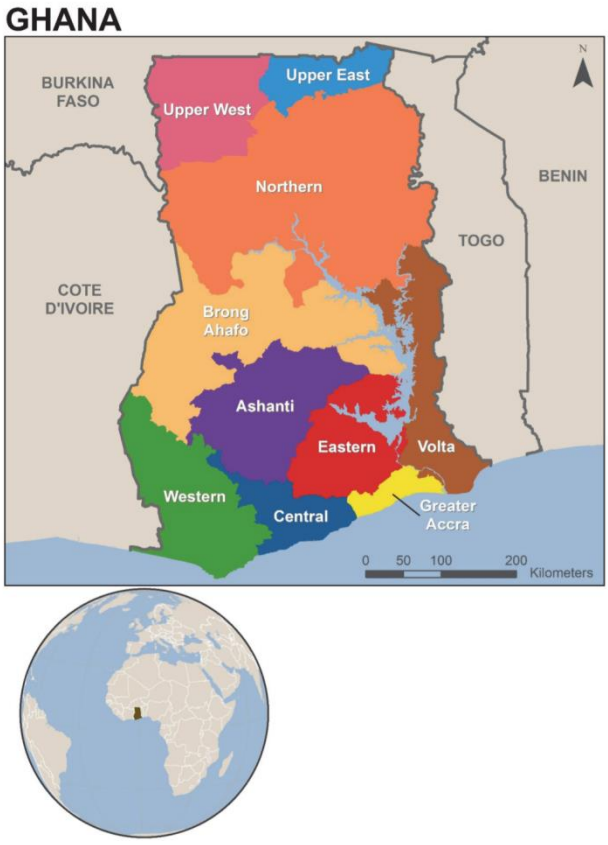
This chapter presents a brief background on Ghana and the healthcare delivery system with particular attention on HIV and AIDS.

1.1 Geographical, administrative, demographic and economic characteristics

Ghana is a developing country in the western part of Africa. It shares borders with three French speaking countries namely; Burkina Faso on the north, Ivory Coast on the west and Togo on the east (GSS 2015a; Adongo et al. 2016). In the south of Ghana's border lies the Atlantic Ocean specifically the Gulf of Guinea which stretches to 560 kilometres. Ghana has a total land area of 238537 square kilometres (GSS 2015a; Ameyaw et al. 2016) and it is a lowland country with some highlands on the eastern boarder of the country. Ghana is a tropical country with temperatures ranging between 21 and 36 degrees Celsius around the year (GSS 2015a).

Ghana has 10 administrative regions and 230 districts. Accra is the capital and the seat of government (Cooke et al. 2016). It is a democratic state with three arms of government namely; executive, the legislature and the judiciary (GSS 2015a). Ghana's population is estimated to be 28,308,301 in 2016 (GSS 2016) with a population growth rate of 2.1% in 2013 (GSS 2013). The urban and rural population in 2016 was 54.7% and 43.3% respectively (World Bank 2015). Forty two percent of Ghana's population is below the age of 15 years and 20% of the population is between the ages of 15-24 years (GSS 2013). Figure 1.1 below displays the location of Ghana in Africa.

Figure 1.1: Map of Ghana and the location of Ghana in Africa.



Source: GSS (2015a).

Ghana attained a lower middle income status in 2010 after it carried out rebasing of it economy. The gross domestic product was $ 42.69 in 2016 (World Bank 2017). The major export commodity is raw agriculture products such as cocoa which is the backbone of the economy (GSS 2015a). Other exports products include gold, timber, diamond and crude oil. The fastest and largest contributor to gross domestic product (GDP) is the sales and service sector with the industrial sector the second largest (GSS 2015a). According to the latest Ghana living standard survey round 6, 24.2% of the population live below the poverty line (GSS 2014). There is high concentration of poverty in the northern part of the country (GSS 2015b). The total number of mobile subscribers per 100 inhabitants in a geographical area is 131.9% at the end of 2016 (National Communication Authority 2016).

1.2 Social characteristics

Ghana has two dominant religious groups mainly Christians and Muslims. According to the latest demographic health survey report [DHS] (2014), 80.2% of the population are Christians and Muslims comprise of 15.2% of the population. The rest of the population belongs to other religions. Ghana has a rich cultural diversity with more than 63 different spoken dialects in the country. Cereals such as sorghum, millet, maize, rice and tubers such as yam, cassava are the commonest basic staple foods in Ghana. The Akan ethnic group is the largest ethnic group in Ghana forming almost 50% of the entire population. The official language is English and Twi is the most common local language spoken by many (GSS 2015a). Eighty-two per cent of males and sixty-seven per cent of females are literate in Ghana. Among young people (age 15-24 years), 89.3% of males and 80.9% of females are literate with 80.4% men and 73.6% females with high school education and above (GSS 2015a). However, adolescent girl's dropout rate has consistently been a problem for the country (GSS 2015a).

1.3 Health status indicators

Ghana is having a double burden of diseases with communicable diseases burden remaining high and increasing trend of non-communicable diseases (NCDs). Malaria is the leading cause of morbidity and mortality. HIV and AIDS was the fifth cause of mortality in 2012 (World Health Organization [WHO] 2015). The top 10 causes of morbidity and mortality have been attached in annex one.

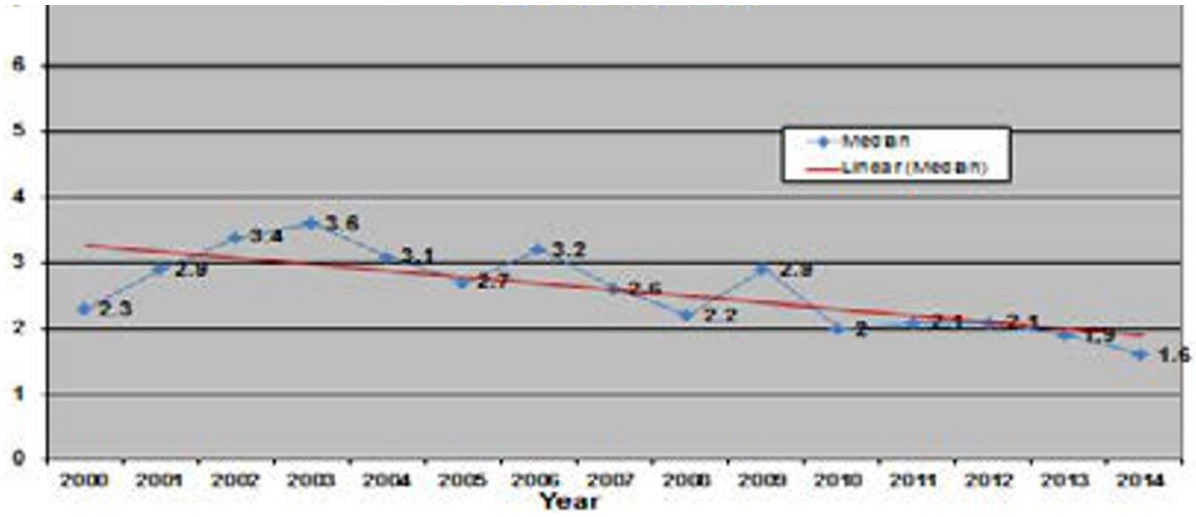
1.4 Health system

The health system of Ghana is organized at the national, regional and district levels (MOH 2014). The Ministry of Health develops policies, monitors and evaluates the implementation of policies and programmes. The Ghana Health Service (public), Christian Health Association of Ghana (CHAG-private not-for-profit), teaching hospitals (public) as well as private clinics and hospitals are the health service providers (MOH 2014). The National Health Insurance Authority is the largest financier of the health service delivery in Ghana but faces sustainability and efficiency challenges (MOH 2015a). There has been great improvement in the availability of health workers over the years. However, the inequity in the distribution of health care workers especially midwives and doctors as well as allied health workers continue to be a major challenge especially in the rural areas (MOH 2015a). As at 2014, there were 118 training institutions responsible for the training of various health professionals (MOH 2014). The key health professionals per population ratios in Ghana have been attached in annex three.

1.5 HIV AND AIDS in Ghana

The prevalence of HIV among people age 15-49 years is 1.6 in the general population. According the 2016 sentinel survey report, the prevalence among people aged 15-24 is 1.1% and the HIV prevalence among pregnant women is 2.4% (GAC 2017). There has been a general decline in the prevalence of HIV since Ghana for the year 2000 (GAC 2015a). Figure 1.2 below is the median prevalence from the year 2000 to 2014 with a linear trend.

Figure 1.2: Median HIV prevalence 2000-2014 with a linear trend in Ghana.



Source: GAC (2015a).

Some other indicators of the burden of HIV in Ghana are in the table 1.3 below;

Table 1.1 HIV indicators in Ghana, 2014.

Indicator	Value
Number of PLHIV in Ghana (infected people)	250,232
Number of new infections	11356
AIDS related deaths	9,248
Prevalence among female sex workers in 2011*	11.1%
Prevalence among men who have sex with men in 2011*	17.5%
Number of people who went for HTC and received results	798763
Condoms distributed	20,880,654

Source: IBBSS (2011)* cited in GAC (2015a); GAC (2015a)

1.6 HIV prevention health service in Ghana

HIV services currently available include the following;

1.6.1 Mother to child transmission (MTCT)

Ghana has made tremendous progress towards ending the mother to child transmission of HIV and AIDS. Ghana uses the provider initiated HIV testing and counselling (HTC) at antenatal clinics throughout the country. About 70% of pregnant women who attended ANC had HTC one and received their results (GAC 2015a).

1.6.2 Behaviour change communication (BCC)

Positive behaviour towards safer sex including use of condoms has been promoted among the general population over the years through mass media campaigns such as radio and television, testing and counselling centres, social clubs and outreach programmes (GAC 2015a; GAC 2016). BCC has a potential to influence the knowledge and attitudes of people as well as their families and communities. Peer education programmes are also available in schools and some communities. Education on sexuality and reproduction is also included in junior high school curriculum (GAC 2015a).

1.6.3 HIV testing and counselling (HTC)

Testing and counselling services are provided in both public and private health facilities in Ghana. Coverage for HTC is 13% in females and 6% in males. This difference is due to the fact that, 90% of the testing and counselling is among pregnant women who attend antenatal health services (GAC 2015a). HTC is done for individuals and couples who visit the HTC centres. Over the years, HTC on outreach ("know your status campaign") basis has reduced drastically due to dwindling funds and the focus on institutional HTC (GAC 2015a). For instance, a total of 798,763 people were tested in 2014, representing 50% of the target for the year (GAC 2015a).

1.6.4 Treatment and care for HIV/AIDS

The availability of antiretroviral therapy (ART) in Ghana has reduced deaths due to HIV and AIDS but intermittent shortages show that more efforts are needed (Addo et al. 2014; GAC 2015a). Treatment is given to any client as soon as he/she is confirmed positive (MOH 2016). ART was provided in 145 districts out of 216 districts in 2015 (70% of the district), but ART is has been disrupted intermittently due to shortages in the supply of ART drugs (GAC 2015a).

1.6.5 Condom distribution and use

Condoms are distributed across the country by both private and public providers in Ghana. In 2014, a total of 20,880,654 condoms were distributed in the country (GAC 2015a). In 2014, 327 condom vending machines were installed in public places to increase accessibility to condoms. Condoms are also available for sales in pharmacies, drug stores, hotels, groceries and supermarkets (GAC 2015a).

1.6.6 Screening of blood and blood product services

All the health facilities that collect blood are provided with HIV test kits and an estimated 168,978 units of blood were screened in 2014 with 5% of the blood testing HIV positive (GAC 2015a).

1.6.7 Sexually transmitted infection services

Sexually transmitted infections (STIs) increase the risk of HIV infection (GAC 2013). Ghana uses the syndromic management of STI with emphasis on early detection and treatment. An estimated 242,850 cases were detected and treated in 2014 (GAC 2015a).

1.7 Organisation and Governance related to HIV

The Ghana AIDS commission (GAC) is a supra-ministerial body (directly under the office of the president) established in 2002 to provide support, guidance and leadership for all national response to the HIV and AIDS pandemic (GAC 2015a). GAC has representation from multiple sectors including non-governmental organizations (NGOs), religious bodies, private sector, people living with HIV (PLHIV), youth and women organisations and research institutes. Ghana's response to HIV and AIDS is through the multi-sectorial approach. From the year 2000 to 2015, new HIV infections and AIDS related deaths by has declined 57% and 33% respectively (UNAIDS 2017b). Despite these successes, stigma remains a big challenge affecting access to HIV prevention services (GAC 2015a; GAC 2016; UNAIDS 2017b)

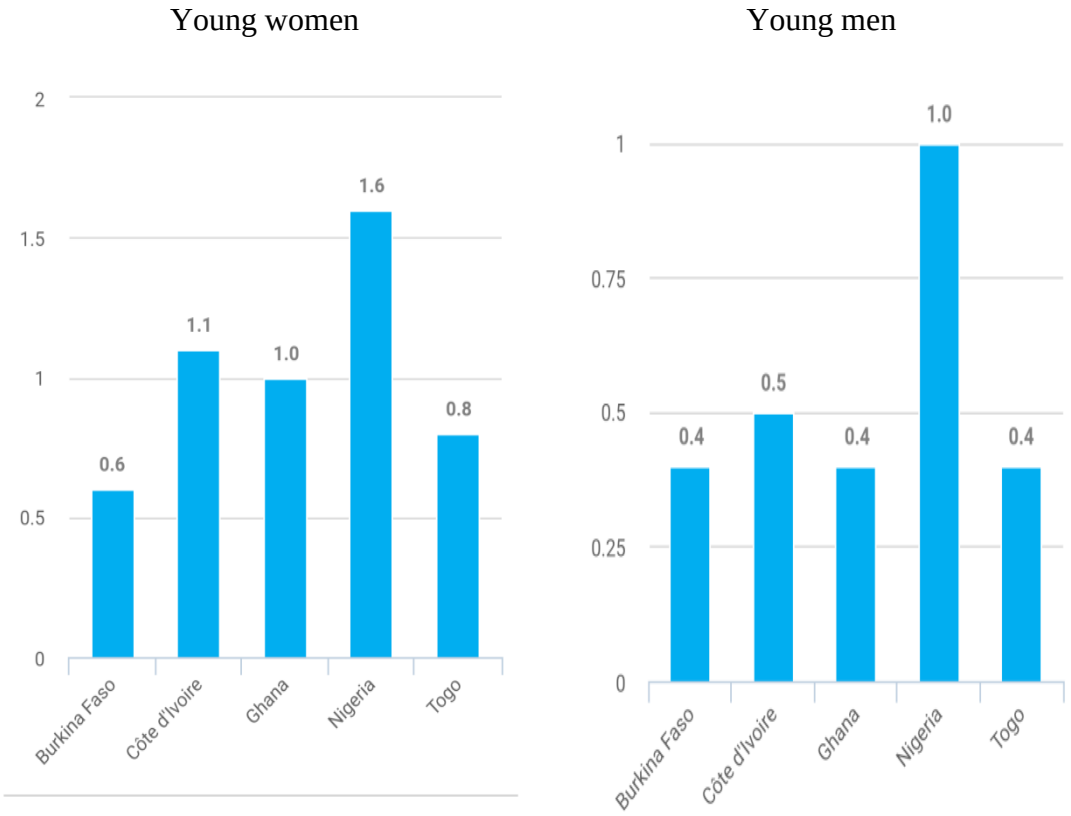
CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION AND METHODOLOGY

The chapter describes the nature and extent of the problem and justifies the need to conduct this study. The methodology including the conceptual framework used to conduct the study has been described.

1.1 Problem statement

There has been a decline in the prevalence of HIV among young people in West and Central Africa region since the year 2010. However, the decline in the HIV prevalence among young people has been stagnant since 2014 remaining at 1.1% among young women and 0.6% among young men (UNAIDS 2017a). An estimated 820,000 (370,000-1,300,000) young people were living with HIV in this region at the end of 2016 (UNAIDS 2017a). More than 70% of the new infections occur in eight counties including Ghana and its neighbours Nigeria and Ivory Coast (UNAIDS 2016). Figure 2.1 is the prevalence of HIV among young people in Ghana and Neighbouring countries.

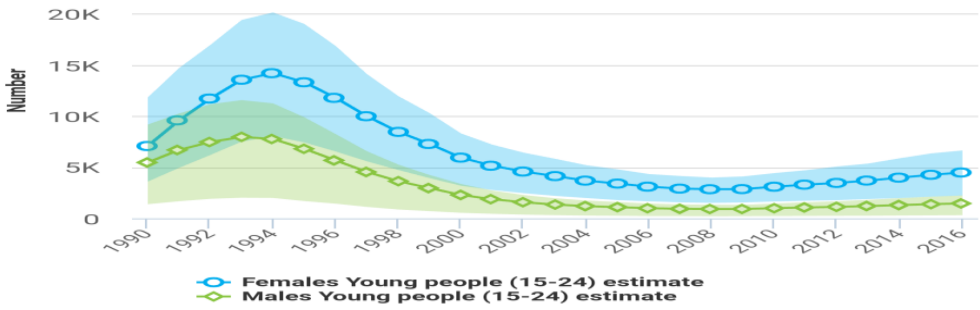
Figure 2.1: HIV prevalence among young people in Ghana's neighbouring countries from the year 1990 to 2016.



Source: UNAIDS (2017a).

In Ghana, HIV prevalence among young people is estimated to be 1.1 according to the 2016 sentinel survey, the same as in 2015 (GAC 2017). In 2013, the prevalence among young people was 1.2% but in the year 2014, it rose to 1.8 % (GAC 2015a). Figure 2.1 below is the estimated trend of new HIV infections among young people in Ghana from 1990 to 2016.

Figure 2.1: UNAIDS estimates of number new HIV infection among young people in Ghana by sex from 1990 to 2016.



Source: UNAIDS (2017a).

To reduce the number of new infections, the World Health Organisation (WHO) proposes prevention-related interventions such as abstinence from sexual intercourse and delayed initiation of sexual behaviour for young people, decrease the number of sexual partners among sexually active as well as quality and accessible HIV preventive services (WHO 2017).Unfortunately, comprehensive knowledge including knowledge of how to prevent HIV is low with an estimated 31% of young men and 24% of young women among in the West and Central Africa having comprehensive knowledge about HIV (UNAIDS 2016). Furthermore, access to HPS among young people is low in many settings (Biddlecom et al. 2007; UNAIDS 2014b; Newton-Levinson et al. 2016) including Sub-Saharan Africa (WHO 2017).

Table 2.1 Knowledge and behaviour (including health service behaviour) of young people in from the 2008 and 2014 demographic health surveys, Ghana.

Preventive strategy	**Indicator Among young people**	**Sex**	**2008* (%)**	**2014 (%)**
BCC	Percentage of YP who have comprehensive knowledge of HIV	Male	34.2	27.2
		Female	28.3	19.9
STI	Percentage of self-reported STI in 12 month prior to the survey	Male	3.4	8.6
		Female	5.2	7.7
HTC	Knowledge of where to obtain (source) HTC (Percentage)	Male	70.9	74.0
		Female	67.6	72.3
	Ever tested (Used), percentage	Male	8.2	10.6
		Female	13.4	31.4
	Never tested, percentage	Male	91.8	89.4
		Female	86.6	68.6
	Has gone for testing in the past 12 month, percentage	Male	3.4	2.5
		Female	4.9	9.9
Condoms use	The percentage of YP who had sexual intercourse with a non-marital, non-cohabiting partner in 12 month prior to the survey and used condoms	Male	46.4	34.2
		Female	28.2	14.9
	Knowledge of where to obtain condoms (source)	Male	86.8	87.9
		Females	73.9	71.6

Source: GSS (2009)*; GSS (2015a)

Furthermore, the most recent DHS (2014) report revealed that comprehensive knowledge of HIV among young people was only 27.2% in male and 19.9% in females. This represents a decline of 20% among young men and 31% among young women as compared to 2008 data (34.2% for males and 28.3% for females). In addition, the proportion of young people who had sexual intercourse with a non-marital, non-cohabitating partner and used condoms declined from 46.4% (males) and 28.2% (females) in 2008 to 34.2% (males) and 14.9% (females) in 2014. HTC and percentage of young people who were diagnosed with an STI and reported for treatment continues to be low among YOUNG PEOPLE (GSS 2015a). Available data on access to HPS among YOUNG PEOPLE in Ghana are displayed in Table 2.1 in the next page.

Several studies and reports conducted in Ghana suggest low uptake and access to HPS among young people (Biddlecom et al. 2007; Aninanya et al. 2015; GAC 2015a; GAC 2016)

1.2 Justification

There are many reasons for the attention on young people and HIV. First, they constitute a significant proportion (20%) of the population of Ghana (GHS 2016a). The period of adolescence is the time where young people undergo extensive and complex biological, socio-economic and psychological changes(UNAIDS/UNICEF 2015; Rankin et al. 2016). Poor access to HIV HPS among young people at this stage of development increases their vulnerability to STI infection including HIV (UNAIDS 2014b; WHO 2016b). Young people are therefore at a higher risk of STI infection including HIV than older people in the population (WHO 2016b). HPS provides an opportunity for young people to be well informed about their sexuality and make informed decisions about sexual and reproductive health (Yidana et al. 2015; Newton-Levinson et al. 2016; UNAIDS 2016)

Also, the scale up of efforts which is aimed at achieving universal access to ART requires that many who are eligible for ART including young people are enrolled and encouraged to access ART services (Ferrara 2012). However, enrolment of young people on ARTs may be limited due to limited access to HTC services which usually is seen as an entry point to other services, including ART (GAC 2016)

Furthermore, young people are more likely to suffer gender based violence and are less likely to seek health care for sexual health issues such as HIV (MSI 2013). Young adults are more likely to suffer stigma and discrimination than other people living with HIV or AIDS (Apanga et al. 2015; Govindasamy et al. 2015; Teklehaimanot et al. 2016).

Several empirical studies have explored access and utilisation of HPS among the young people in Ghana (Agyemang et al. 2012; Darteh & Nnorom 2012; Asante & Oti-Boadi 2013; Darteh et al. 2014; Ndabarora & Mchunu 2014; Aninanya et al. 2015; Apanga et al. 2015), however, the evidence remains fragmented. This study therefore conceptually reviewed existing literature that explored factors influencing accessibility to HPS in Ghana.

Lastly, access to HPS (among young people) under the MOH and NGO that collaborate with the health sector was chosen because there is low use of HPS (UNAIDS 2017b). Access HIV preventive services are critical to improve the sexual and reproductive right and overall health of young people and also their ability to reach their full potential in life (Rankin et al. 2016). Therefore, understanding of the factors influencing access to HPS among YOUNG PEOPLE will help policy makers develop comprehensive, evidenced-based interventions to improve access to HPS for young people.

1.3 Research objectives

The main objective is to explore the factors influencing accessibility to HIV prevention services (HPS) among young people in Ghana in order to strengthen HIV prevention responses and reduce new HIV infections among young people in Ghana.

Specific objectives are;

1. To explore the client factors influencing access to HPS among young people in Ghana.
2. To explore the health service factors influencing access to HPS among young people in Ghana.
3. To identify and discuss evidence-based strategies and interventions that have enhanced access to HPS in Ghana and Sub-Saharan Africa.
4. To make appropriate recommendations to policy makers and program managers of HPS in the health sector and related stakeholders.

1.4 Methodology

1.4.1 Review of literature

This is a qualitative, exploratory study, using literature review and desk study as main methods. The review was conducted with information from peer-reviewed articles from journals as well as grey literature (DHS report, project documents, policy documents and technical papers). Analysis was done using conceptual framework of access to health care developed by Lesvesque et al. (2013).

1.4.2 Search strategy

Google Scholar, PubMed, OvidInsights, Taylor & Francis Online search engines were used to search for peer reviewed-literature. Articles from the Journal of Adolescent Health, LANCET data base, Cochrane library, VU library, and KIT library were accessed. References of selected articles were searched. Websites GAC, GHS, MOH, Ghana Statistical council (GSS), World Health Organisation (WHO), United Nation Programme on HIV and AIDS (UNAIDS), FHI, Planned Parenthood Association of Ghana (PPAG) and United States President's Emergency Plan for AIDS Relief (PEPFAR) were accessed for the study. The search was conducted using search-terms "HIV", "AIDS", "STI", "outreach", "screening", "culture", "gender", "cost", "social support", "empowerment", "health literacy", "availability", "acceptability", "affordability", "interventions", "young people", "Ghana" and "Sub-Saharan Africa". The combination of key terms has been attached in annex four. In PubMed, MESH terms were used to access literature. However, most of the terms were not available in MESH. The terms used in PubMed have been attached in annex five.

1.4.3 Inclusion and exclusion criteria

Only literatures in English from the year 2007 to 2017 were included in the study. However, if an article is deemed very important and relevant to the study, it will be included in the study. HPS are often captured under the broad cadre of SRH services in Ghana. Therefore, articles on factors influencing the use of SRH services which included HPS services among young people were also included in the study. The literature review included studies with a variety of methods qualitative, quantitative and mixed methods. Duplicates, title and abstract review was done to exclude literature based on the relevance, language, population of interest, geographical location and primary focus. Thereafter, further articles were excluded by reviewing or reading fully the articles. In PubMed, initial searched results were further limited to articles in the past ten years, full free articles which was conducted on humans as

well as in English language. The inclusion and exclusion criteria have been detailed in annex 4.

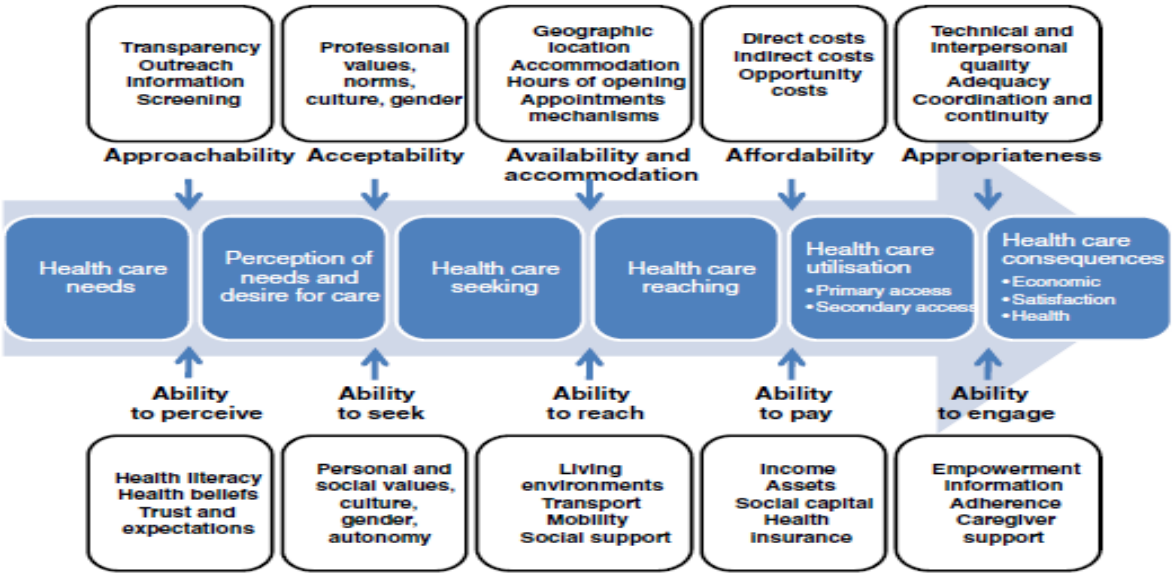
1.4.4 Limitations of the study methodology

There are limited published articles with age disaggregated data on the use of HPS in literature in Ghana (Biddlecom et al. 2007).

1.4.5 Conceptual Framework

Four models were considered initially for the study including Andersen (1995), the health seeking behaviour model (Andersen & Newman 2005), the socio-ecological model (Kaufman et al. 2014) and access to health care model by Levesque et al. (2013). The access to health care model by Levesque et al. (2013) was used for this study. The model was chosen because it defines accessibility to healthcare services in a broader term with both user (referred to as young people in this study) and health care services (referred to as HIV preventive services in this study) characteristics (Davy et al. 2016; Richard et al. 2016). Access in this model does not stop when the user (referred to as young people in this study) reaches the health care service (referred to as HIV preventive services in this study) but also includes the engagement and interactions that goes on with the use of the service (Davy et al. 2016). The access to healthcare model enables a comprehensive review of how the health service factors (supply) and individual (demand) factors that interacts with each other to influence access to health services (Levesque et al. 2013). According to Levesque *et al*, (2013), accessibility to health services are influenced by the parallel interaction of five dimensions of abilities (ability to perceive, ability to seek, ability to reach, ability to pay and ability to engage) and five dimensions of accessibility (approachability, acceptability, availability and accommodation, affordability and appropriateness). The model is shown in Figure 2.1 below;

Figure 2.3: A conceptual framework of access to healthcare services



Source: Levesque *et al*, (2013).

Approachability refers to the fact that a person having a health need can really identify that a health services exist and can be reached and can have an impact on his/her health. Therefore, health services can be made more or less known to people. Correspondingly, an idividual must also perceive the need for care (Levesque et al. 2013). Acceptability refers to the socio-cultural factors which determine the possibility for individuals to accept the parts of health

and the appropriateness of judgement to seek care. Ability to seek care refers to the autonomy of the individual, knowledge about health service options, the individual's rights and his/her capacity to make a choice determine expressing the intension to seek HPS (Levesque et al. 2013). Availability and accommodation is when the health service (physical space and health workers) can be reached physically and in time. It is restricted when health services are not evenly distributed. Ability to reach refers to the personal mobility, means of transport and job flexibility (Levesque et al. 2013). Affordability refers to the individual capacity to pay and the time to use appropriate health service. It is a reflection of the opportunity cost, price of the service and other expenses. Ability to pay refers to capacity to raise economic resources without incurring catastrophic expenditure (Levesque et al. 2013). Appropriateness refers to the fit between the client needs and the health services. It includes the amount of care spent in assessing the health problem, identify the correct treatment, technical and interpersonal quality of HPS. Ability to engage refers to the participation and involvement of individuals in decision-making and treatment (Levesque et al. 2013).

CHAPTER THREE: STUDY FINDINGS ON FACTORS INFLUENCING ACCESS TO HIV PREVENTION SERVICES AMONG YOUNG PEOPLE

This chapter addressed the first, second and third objectives of the study using the conceptual framework. Ability to perceive and ability to engage which are mainly attributes of the individual were considered in this study as under individual determinant (demand side). Ability to seek, ability to reach and ability to pay were considered as environmental determinants because they are largely social characteristics. The health system determinants included issues related to approachability, acceptability, availability and accommodation as well as affordability and appropriateness. These were also done in order to have a better presentation and organisation of the components of the framework and the objectives of the study.

3.1 Individual determinants (demand side)

3.1.1 Ability to perceive

Health literacy

Health literacy is defined as "the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health" (WHO 2016a). Arguably, health literacy in relation to HPS will depends on the level of education, knowledge and understanding of HIV and HPS including perception of vulnerability to HIV.

Biddlecom et al. (2006) pointed out in their study in Burkina Faso, Ghana, Malawi and Uganda that the lack of knowledge about where to go for STI treatment or the lack of understanding of what goes on at STI treatment centres among sexually active young people limits access to STI service. However, Asante & Oti-Boadi (2013) identified that, the knowledge about where to go for HTC may not necessarily lead to HIV testing among young people as majority of the young people in the study knew where to go for HTC but had not gone for the test.

On level of education in relation to health literacy, young people's level of education has been found to be positively associated with access to HPS (Sanga et al. 2015)**.** Access to HTC among young people increased as the level of education among the young people increased (Sanga et al. 2015)**.** In Ghana, Darteh et al. (2014) found that uptake of HTC was 14.2% among females and 3.3% among males without formal education compared to 18% among females and 16% among males with formal education.

Health literacy may also be influenced by the risk perception among young people. A study in Tanzania on factors influencing HTC among young people reported that, young people considered themselves to be at low risk of being infected by HIV and they did not see the importance of going for HTC (Sanga et al. 2015). Similarly, a study in Ghana reported that young people tend to go for HTC when they are having fear of being infected because they have engaged in high risk sex (having several concurrent sexual partners, un-protected sex) or desire to know their status because they want to marry (Darteh et al. 2014).

Family, friends, mass media and teachers are usually one of the major sources of information (Biddlecom et al. 2006; Manu et al. 2015; Challa et al. 2017). However, information with regards to sexuality and reproduction including HPS are not discussed or made available to young people by their family for fear of exposing young people to sex. Denison et al. (2008) reported that young people feared being scolded by their parents on sex issues including HPS. Young people identify with their peers and may often listen to them despite sometimes, the

inaccuracy of the information received and advice may be supportive or not supportive of HPS (Challa et al. 2017). In a study in Zambia a young person said "I asked him when it is done and where, he said everyday ... I told him to take me on a Monday that is how I went for testing" (Denison et al. 2008).

Health beliefs

One's belief is shaped by the traditions, religion and community in which he or she lives. The results of these interaction (beliefs) influence their judgement with regards to HIV, HPS and sex (Strauss et al. 2015; Tsegay et al. 2013). A young person may have the belief that young people are not to have sex and may feel ashamed (Biddlecom et al. 2007; Sanga et al. 2015), affecting their ability to perceive the need for HPS.

Trust and expectations

The ability of young people to perceive the need for HPS including treatment of STI is influenced by their trust in the HIV prevention services being provided and their expectation about HIV and HPS (Strauss et al. 2016). Young people expect and trust that HPS will be private and confidential as well as addressing their needs (Strauss et al. 2015; Tsegay et al. 2013; Ndabarora & Mchunu 2014). In a discrete choice experiment involving young people in KwaZulu-Natal, young people emphasised confidentiality as necessary for HTC. Lack of confidentiality affects young people's ability to acceptability for HTC and further limits access to HTC (Strauss et al. 2015).

3.1.2 Ability to seek

The personal and social values, culture, gender and autonomy of young people influence accessibility of HPS service by affecting the ability to seek for HPS (Newton-Levinson et al. 2016).

Personal and societal values

The personal and societal values are influenced by religion and culture of the people (Amoako-Agyeman 2012). In Ghana, the major source of HIV infection is unprotected heterosexual contact (GAC 2015a; Darteh et al. 2014). However, the discussion of sexual issues is considered a "no go area" in Ghana by the society due to culture and religious sentiments (Amoako-Agyeman 2012; Tenkorang & Adjei 2015; Krugu et al. 2016). Due to this, issues related to sexual and reproductive health services, including where to seek HPS are not freely discussed by societal groups like parents, teachers, churches, mosque and health workers even when the policy and laws allows them to do so, and making use of such services is frowned upon. Societal norms that prevent the discussion of sex in the society, including with service providers create an environment of fear and shame for young people to seek HPS (Cederbaum et al. 2015; Sanga et al. 2015). Young people also feared being labelled as being infected with HIV when they seek services at HTC centres (Sanga et al. 2015). A study involving young people from Ghana, Burkina Faso, Malawi and Uganda reported that they felt afraid, embarrassed and shy to seek for STI services (Biddlecom et al. 2007).

Culture

Ethnic origin and religion shapes the cultural norms regarding the sexuality of young people (Odumegu & Somefun 2011; Osafo et al. 2014; Heinemann et al. 2016). In the past, cultural initiation rites were conducted for young people to usher them into puberty in Ghana. Sex before marriage was a taboo and the perception was that young people are not to engage in

sexual acts (Osafo et al. 2014). A contrary behaviour was met with strict punishment and was also seen as a disgrace to the family. Although this practice has died-down, sex among young people is still frown-upon and discussions on issues on sex is most of the time prohibited at home (Osafo et al. 2014). According to the annual report of the family health division of GHS, these socio-cultural environments have not improved (GHS 2016b).

However, it is known that a supportive attitude by discussing issues about sex, sexuality and reproduction tends to encourage YOUNG PEOPLE to use HPS and that a discouraging attitude tends to limit participation and use of HPS (Newton-Levinson et al. 2016).

Gender

There is growing literature pointing an association between gender and access to HPS (MacPhail et al. 2009; Cherinda & Peltzer 2014; Sanga et al. 2015; Tsegay et al. 2013; Darteh et al. 2014). Females in general tend to seek HPS more than men (MacPhail et al. 2009). A study in Ghana using the DHS to explore the socioeconomic factors influencing access to HTC among young people in Ghana reported that females tend to use HTC services more than males (Darteh et al. 2014). According to the study, the difference may be due to the perception by females that they are at more risk of HIV while males perceive they are less vulnerable to HIV (Darteh et al. 2014). However, his finding was contradicted in a study involving young people in a private university in Ghana which found males more likely to seek HTC (Asante & Oti-Boadi 2013).

In a study on utilization of HTC service in Uganda, more young females than males were likely to seek HTC services (Mafigiri et al. 2017), but this was contrary to a study involving four countries in SSA where Ghanaian respondents reported knowing where to seek STI services and actually sought STI services more than females (Biddlecom et al. 2007).

Autonomy

The degree of autonomy for young people arguably increases with age as young people grow towards adulthood. In Ghana, age is an influencing factor of autonomy among young people. Age has been identified as an influencing factor to accessibility of HPS (Asante & Oti-Boadi 2013; Darteh et al. 2014).

HIV testing among young people in undergraduate university was found to be decreasing as the student age increases (Asante & Oti-Boadi 2013). The rate of uptake of HTC by respondents was higher among student from 18 years to 24 years than those under 18 years. The association between increasing age and use of HTC services was also corroborated by a study among Ghanaian youth (Darteh et al. 2014).

The degree of autonomy is also influenced by wealth status among young people. Darteh et al. (2014) identified that increasing wealth status increases ability to pay and decision making on the use of HTC services among young women. Wealth status had no significant influence on the use of HTC among young men.

3.1.3 The ability to reach

HPS relates to how easy it takes young people to reach HPS when needed. It includes the means of transport and mobility, social support and living environments of young people.

Living environment

The living conditions including education and rural or urban differences may have effects on ability to reach. There is disproportion distribution of SRH services including HPS along rural urban divide in Ghana (GAC 2015a; Darteh et al. 2014; GHS 2016a). According to the 2014 DHS, coverage for HTC in urban areas was 15.1% whiles that of rural areas was 10.4%. However, in a study of the determinants of HIV testing among young people in Ghana, Darteh et al. (2014) reported that there was no association between living in a rural or living in an urban area and HTC testing although there were inequalities and equity to access health facilities.

Transportation

On transportation, Strauss et al. (2016) pointed out that, offering free HTC services does not eliminate cost because young people may have to pay for the cost of transportation to access HPS. And that the cost of transportation may prevent young people from reaching the facility for HPS.

Social support

Social support from friends, family and partners are known to play important role in health seeking behaviour. In Ghana, the Asante and Oti-Boadi (2013) study on young people in private universities pointed out that there is an association between HTC testing and marriage. According to the study, students who were single had more often tested for HIV and were more likely to test for HIV in future than those who were married. A study Darteh et al. (2014) also came out with the same finding.

3.1.4 Ability to pay

Income, assets and social capital

The ability to pay for HPS is related to the economic status (income, assets and social capital) and insurance. A study using the data of the DHS in Ghana reported that, economic status is an influencing factor to HTC (Darteh et al. 2014). The association between use of HPS and the economic status of young people has been discussed under the autonomy section.

Health insurance

The National Health Insurance Scheme (NHIS), a social insurance scheme provides financially risk protection against cost of basic healthcare services in Ghana. HPS including HIV testing and condoms are not covered under the NHIS. However, HPS are free in Ghana with the exception of condoms which are subsidised and available in both public and private health facilities (GAC 2013; GAC 2015a).

3.1.5 Ability to engage

The ability to engage relates to the participation and involvement in decisions regarding care. One can participate or involve in care if he or she is empowered to do so. The support the caregiver provides and the quality of information young people have about health services encourages adherence. The source of information, the message communicated in a clear and simple language and the environment for communicating the message are critical for understanding, engagement and adherence (Levesque et al. 2013).

Information

One's ability to engage also depends on the kind and quality of information he or she knows (Levesque et al. 2013). Access to appropriate health information by young people remains very poor in Ghana (GHS 2016a).

Empowerment

Madiba & Mokgatle (2015) pointed out that, counselling and sexuality education empowers young people, improves their health literacy, improves their ability to participate in care and adhere to advice and protect themselves from HIV infection. Empowerment may also to a large extent depend on the professional attitudes of health workers, culture, norms, policies and laws that ensure young people's right to health including HPS. In Ghana, the law requires consent of parent or guardian for young people under the age of 18 years. This limits the involvement and participation of young people in HPS including HTC (GAC 2013). The engagement and participation of young people in health services and programmes is weak but has seen considerable progress (GHS 2016a).

Adherence

In Ghana, Wolf et al. (2003) in their study on the influence of peer and adult communication on HIV protective behaviour among young people stated that, when peer educators (providers) are used to communicate SRH information to young people, they are more likely to adapt and adhere to HIV protective behaviours than using older adults. However, a study in South Africa reported that peer educators do not influence accessibility to HPS (Strauss et al. 2015). A major challenge for the fight against HIV in Ghana has been stigma (GAC 2015a). HIV stigma has adversely affected multiple aspect of engagement including adherence (Katz et al. 2013). Stigma prevents young people from carrying and using condoms that they have accessed from healthcare providers.

Caregiver support

Another aspect of ability to engage is caregiver support. The support from caregivers is also important for adherence and also for ability to engage in care (Levesque et al. 2013). Arguably, the attitude and the attributes of caregivers can be described either supportive or not supportive. Caregiver may be described as supportive when they provide services without judging the young people. Usually, young people identify themselves with a caregiver who is of their age than an older person who is identified with the parent (Ndabarora & Mchunu 2014). Alli et al. (2013) identified that young people need more information from caregiver but the caregivers did not provide them. This was due to shortage of staff and time constraints (Alli et al. 2013). Age, an attribute of the caregiver may affect the relationship (supportive or not supportive) between the caregivers and young people. The age of caregivers as may be seen as supportive if the caregiver is also young and the young people feel free to discuss their problems without hesitation (Alli et al. 2013; Godia et al. 2013; Ndabarora & Mchunu 2014).

3.2 Health service factors

3.2.1 Approachability

The approachability of HPS depends on the information, transparency and availability of outreach programmes and screening services (Levesque et al. 2013).

Transparency and information

Access to health services by people is often preceded with awareness about the service. In Ghana, the most common source of information among young people according to the DHS in 2014 is television and radio. Media message have been used in BCC programmes, condom promotion and use (GAC 2015a). Information about health services including HPS are publicised also through personal contacts with those who have used the facility. Formation of adolescent clubs in educational institutions also gives RSHR services including HPS information a mileage among young people (GHS 2015b). Printing and distribution of booklets, posters and newsletters are done to provide information to young people about SRHR including HIV and HPS in the country. A drama based television series "YOLO" meaning "youth only live once" and a talk show "YMK-YOLO Chit-Chart" are telecast nationwide on national television to inform young people on SRHR including HPS (GHS 2015b).

Outreach and Screening

In Ghana, HPS outreaches and mobile centres are in communities especially to key populations (men who have sex with men, female sex workers and their paying partners, prison inmates) through peer education groups, health workers and non-governmental organisations (NGO) (GAC 2015a). Peer education programmes and outreaches have been used to sensitize and distribute communicative messages about HIV and HPS improving the awareness about HIV and HPS (PPAG 2016; PPAG 2015). According to Adeomi et al. (2014), peer education programmes among young people improves HIV knowledge, attitudes and access to HPS among in-school young people.

3.2.2 Acceptability

The acceptability of HPS among young people depends on professional values, norms, culture and gender of health workers.

Professional values, norms and culture

Many studies described attitudes of caregivers as being judgemental, condemning attitude of young people, being harsh and giving long lectures and giving inappropriate and unsolicited advice by health professionals (Biddlecom et al. 2007; Madiba & Mokgatle 2015; Thatte et al. 2016; Challa et al. 2017). Healthcare worker's ability to discuss sexuality with young people may encourage accessibility. If healthcare workers are professional, friendly and un-judgemental, it promotes acceptability and use of HPS. However, negative attitudes (blaming, judgemental, unfriendly, yelling, scolding, lecturing, being rude) will affect utilization negatively (Ndabarora & Mchunu 2014). In a study to explore the factors influencing accessibility of SRH services, a health worker said "It is true because I look at a young boy and girl who have come for condoms and they are the age of my son or daughter and I will ask, why are you taking them? And a young girl who has come for contraceptives then you start preaching to her or lecturing her and that is what they do not want" (Godia et al. 2013 pp. 7). This statement depicts the attitude of some health professionals towards young people in accessing HPS. There was no literature found on the influence of the gender of the healthcare provider on accessibility to HPS. However, it is also known that in some countries, a male provider is not supposed to attend to a female client and vice versa. Where there are shortages of staff, it may limit access to SRHR services including HPS.

3.2.3 Availability and accommodation

The geographical location, hour of opening and appointment mechanism influence the availability and accommodation of HPS.

Geographical location

Health services for young people in Ghana are unequally distributed (GHS 2016a). In Ghana, establishment Community-based health planning and services (CHPS) in rural areas in Ghana has improved brings services including HPS services to these communities. In a study in Ghana, unavailability of HTC centres on university campuses in Ghana negatively influence the service utilization despite high desire and level of knowledge about HTC (Asante & Oti-Boadi 2013). Another study in Ethiopia reported that VTC centres are too far from young people's place of residence (Ndabarora & Mchunu 2014). This may have effects on ability to reach HPS as well as approachability of HPS which have been discussed in earlier sessions.

Appointment mechanism

Several studies identified the time spent waiting to receive HPS as an influencing factor in accessing HPS (Ndabarora & Mchunu 2014; Strauss et al. 2015; Godia et al. 2013). In a study in South Africa, respondent said "It is not comfortable waiting in the queue, it makes you anxious because you are uncertain of what will transpire in those rooms, especially when others have finished and you are still waiting your turn and anticipating what is going to happen to you. Waiting gives you pressure and more fear" (Strauss et al. 2015 pp. 6). Another study in Kenya reported "time period, we have very long queues that is also another weakness, the youths are impatient, they don't wait for long, some of them maybe have run away from home, they don't want to be seen, all that contributes" (Godia et al. 2013 pp. 8).

Hours of opening

Health workers identified inconvenient hours of opening as a factor influencing access to HPS (Godia et al. 2013). Health facilities are open during working hours when young people are studying in school, requiring young people to miss classes in order to go for HPS (Cherie & Berhane 2012). Because the opening hours are not convenient, young people are not able to access HPS services (Cherie & Berhane 2012; Godia et al. 2013).

Accommodation

Accommodation of HPS is affected by the opening hours, appointment mechanism and the cost of HPS which have been address in this section.

3.2.4 Affordability

The direct cost, indirect cost and opportunity cost of HPS determines how affordable the service is to young people.

Direct cost

A study in Ethiopia reported cost of VTC services as an influencing factor in accessing VTC services (Ndabarora & Mchunu 2014). However, a study in Ghana to access how barriers differed depending on the type of SRH services in including HIV/STI testing identified cost as not a barrier to HIV/STI testing (Cederbaum et al. 2015). Condoms and some medications for treating STI as well as laboratory services are not free. Young people are often not able to

afford to pay the cost of these services (Godia et al. 2013). Direct cost of services was also identified by young people as limiting accessing STI services in a study in Ethiopia (Cherie & Berhane 2012). A similar finding was also identified by Biddlecom et al. (2006)

Indirect cost

Indirect cost relates to the additional cost incurred by young people in accessing HPS in health facilities but is not link to the fees or payment for the services given. This may include transportation which have been discussed earlier section on ability to pay.

Opportunity cost

In HPS, it implies the alternative loss when young people decides to go and use HPS in a health facility and may be related to the class not attended, the duty at work that he/she could not do, loss of income or even job. Cherie & Berhane (2012) pointed out that young people in their study have to miss classes in order to access HPS thus, acting as a barrier to access to HPS.

3.2.5 Appropriateness

The appropriateness of the HPS to meet the needs of young people depends on the technical and interpersonal quality, adequacy of HPS and the coordination and continuity of the HPS (Levesque et al. 2013).

Technical and interpersonal quality

Health service delivery for young people is largely not integrated, not properly organised and uneven in quality (GHS 2016a). The quality of HPS services also depends on the available number of health workers who are trained to provide adolescent friendly services (in addition to their knowledge and skills in their field of practice).

In an effort to increase improve SRHR of young people, the Nurses and Midwives' Council with the support of Pathfinder through the Africa Youth Alliance project integrated adolescent sexual and reproductive health into the pre-training curriculum of nurses and midwives in Ghana in 2005 (Pathfinder International 2006). In 2015, a mobile application called GHS-ADH-MApp was developed for services providers to interact with resource person in adolescent health and also have access to policy documents, guidelines and protocols (GHS 2016b). Access to the mobile application is limited to few health professionals (GHS 2016b).

Godia et al. (2013) in a study in Kenya to explore the perceptions and experiences of health workers in providing SRH services including HPS documented that, health workers had not even heard of national guidelines or those who had heard of the national guidline did not have it. Health workers also expressed the lack of skills and copetencies to handle young people due to lack of training on how to handle young people (Godia et al. 2013). Shortages of staff affects the operational hours of the SRH unit and limits contacts time with the young people (Godia et al. 2013). Shortages of test kits, gloves and other essential supplies affect the quality of services (Godia et al. 2013)**.** These in turn, also affect the quality, adequacy of care, coordination and continuity of HPS. Young people who needed more attention were not given that time because of the shortages of staff and those who needed attention of specialist could not be provided with such (Godia et al. 2013). Vu et al. (2017) also pointed out that the integration of HIV/STI services with SRH services promotes continuity care. All these affects the appropriateness of HPS and with other factors outlined above influence accessibility to HPS.

Adequacy

Adequacy of HPS may arguably relates to the quality of services caregivers provide, time spent on each young person, how youth friendly the services are and the satisfaction in totality of the services provided. Cherie & Berhane (2012) pointed out in their study in Ethiopia that, the unavailability of HPS targeting the young people influence accessibility to HPS. The existing HPS services are designed for adults or for children, leaving behind young people (Cherie & Berhane 2012).

Coordination and continuity

Coordination and continuity of care is essential for the appropriateness of HPS. Effective coordination between all professionals including laboratory technicians who are required to perform the HIV testing in some facilities is very important. In Cherie & Berhane (2012) study in Ethiopia, identified uncoordinated HPS as young people are referred back and forth between different department.

3.3 Health system policies relevant for HIV and AIDS

3.3.1 National HIV/AIDS and STI Policy

The policy ensures the right of all persons to access HIV prevention, treatment, care and support (GAC 2013). The policy is gender sensitivity by addressing issues of gender based violence as well as also harmonising HIV and AIDS strategies with that of STIs (GAC 2013).

3.3.2 National HIV/AIDS Strategic Plan (NSP)

This policy is the main HIV policy document and seeks to harmonies all the existing policy and strategies on HIV and STI. The policy classifies young people as a vulnerable group and addresses the problems of young people, MSM and female sex workers. The aim is to reduce new infections among young people by 80% from 3,250 in 2015 to 650 in 2020 (GAC 2016).

3.3.3 National Health and Gender Policy

The policy addresses the gender aspects access to healthcare services. However, it tends to address females' access to healthcare and is silent on the accessibility of healthcare by males (MOH 2009).

3.3.4 Legal context

The law allows young people to marry at age 18 but the legal age for consenting to sex according to the law is 16 years. Parental consent is also needed for anyone younger than 16 years for HIV testing and counselling. Homosexuality is illegal and harassment and arrest of MSM and sex workers by the police influence access to HPS in Ghana (GAC 2016). Confidentially of health information is ensured except when there is a court order to a healthcare worker directly involved in care or for epidemiological purposes (GAC 2013).

3.3.5 National Condom and Lubricant Strategy

This policy is to improve accessibility to quality condoms and lubricants in the country to meet the needs of the people especially among key populations including sex workers, MSM, prisoners and young people (MOH 2015b). It recognises the dual role of condoms in protecting against STIs, including HIV, and pregnancy and the need to promote condom use by emphasising demand generation and BCC while ensuring sufficient supply and distribution. The burning of the central medical stores and the purchase of low-quality condoms has affected consumer confidence and acceptability of condoms in the country (MOH 2015b). Condoms and lubricants supplied by the public sector are subsidised but not

for free. The subsidised condoms however are usually not available and ending up in the private commercial health facilities for sale. The cost of condoms, unavailability of condoms in health facilities in the public sector (MOH 2015b).

CHAPTER FOUR: EVIDENCE BASED STRATEGIES AND INTERVENTIONS

This chapter presents effective strategies and interventions within the Sub-Saharan Africa that has addressed most of the important gaps identified and has made improvement in the uptake of HPS among young people.

4.1 Addressing of empowerment and gender

The "young men for equal partners" was developed to improve the involvement of young men in SRHR and indirectly empowering young women and also improving their SRHR. The project was carried out in several countries including South Africa and Tanzania. Young men and women were involved in gender education activities and provides with information on SRHR as well as condom distribution. There were several achievements including an increase in use of condoms and HTC services among men (RFSU 2004).

In South Africa, a soccer intervention (SKILLZ Street) was introduced targeting young females to increase uptake of HTC by increasing the efficacy and belief by using young role models or coaches from the local community over a period of two years (2011 to 2012) (Hershow et al. 2015). The coaches were given training on building HIV and SRH knowledge, facilitation techniques, and skills in working with young people. The curriculum for the intervention was designed based on a pilot study Khayelitsha, South Africa. The intervention improved the self-efficacy and intent of young girls to access HTC testing. Access to HTV was 68.5% after the intervention, far above the nation average among young females of 50.6% (Hershow et al. 2015).

4.2 Addressing quality of services

In Ghana, a community-based adolescent health services intervention was implemented in Kassena-Nankana district northern Ghana over a period of three years. The outcome was to determine if the intervention will led to an increased adolescent access to RHSR including STI management and HTC as well as determining the change in reported service satisfaction among young people (Aninanya et al. 2015). The intervention group was exposed to an adolescent school-based curriculum, peer outreach activities, community mobilisation and youth-friendly health services (YFHS) training for caregivers whiles the control group was exposed to only community mobilisation and YFHS (Aninanya et al. 2015).

There was an increase in access to STI and satisfaction of young people. Young people's satisfaction with SRH services including HPS increased from 18% to 43% among intervention group compared to the control group percentage of 17% to 28% (95% CI 1.63-2.26) (Aninanya et al. 2015). Utilization to HTC services increased from 3% to 13% in the intervention group and from 4% to 11% among control group (95% CI 0.85-1.58) but this was not significant. It however did not have any improvement of access to HTC. Access to STI increased from 3% to 17% among intervention group compared to the control group percentage of 5% to 8% (significant 95% CI 1.78-3.42) (Aninanya et al. 2015).

4.3 Addressing stigma

In Tanzania, during the evaluation of a community control trial study on ASRH (MEMA kwa Vijana) in 20 rural communities in Tanzania the opt-out and opt-in strategy was introduced to see which strategy will increase uptake of HIV testing (Baisley et al. 2012). For the intervention group, a counsellor offered all the young people HIV counselling and testing (opt-out) immediately after the interview and clinical assessment (evaluation data for the "MEMA kwa Vijana" ASRH) were completed (Baisley et al. 2012). For the control group, the young people were told they can go and see a counsellor in different room if they want to do HIV testing (opt-in). Utilization was 90.9% for the opt-out as compared to opt-in value of

60.4% (significant p< 0.001 CI 1.41-1.62) (Baisley et al. 2012). The opt-out approach was associated with a 50% increase in the HIV testing. In the opt-in approach, participants had to take active decision to seek VCT from the counsellor but in the opt-out approach all the participant went to see the counsellor probably preventing the perceived stigma usually associated with HIV testing (Baisley et al. 2012). Therefore, opt-out approach to HIV testing may increase uptake of VCT among young people (Baisley et al. 2012).

4.4 Addressing issues of availability

To increase HIV testing among young people, the government of Namibia piloted HTC in 14 schools in the year 2014. An interactive application was installed on tablets to help them determine their risk for HIV. Consent was sort from parents (signed consent form) and link young people were link to health services. The HTC uptake in the region of the selected schools was used as baseline. The evaluation study showed that having HTC is acceptable in schools and it increased utilization of HTC. The computer tablets motivated young people learn about HIV without fear or shyness and thus, increasing their motivation to go for HTC. Stigma was a major concern of the young people especially among young men which limited these some young men from accessing the HTC service.

In the Regai Dzive Shiri Trial involving 30 communities in Zimbabwe from 2003 to 2007, VCT services were made available to participants and all the community members through health facilities and community lead counsellors (Chirawu et al. 2010). Access to VCT by young people improved when VCT was offered to everyone and also when it is offered outside the health facility (Chirawu et al. 2010). Out of the 16,000 young people who were referred to the health facilities for the testing, only 756 (5%) of them actually visited and took the HIV testing. But when HIV testing was offered to the 2,497 young people immediately in the non-clinic setting, 681 (27%) of the young people did the test. In conclusion, bringing VCT services closer to rural communities and in a non-clinic setting improves access for young people in rural communities (Chirawu et al. 2010).

4.5 Addressing issues of professional attitudes through training of health workers on adolescent friendly services and provision of guidelines

Training of health workers improves their knowledge and attitude towards young people (Renju et al. 2010). It also improves their confidence to interact with young people. Although health workers have been trained on STI including HIV, attending to young people needs special skills to understand and appreciates them. A training intervention was conducted for 429 health professional of diverse backgrounds “adolescent friendly services” in Tanzania. The training also provided guidelines for these health workers. The post-test evaluation showed an improved knowledge and understanding of young people. A practical evaluation using mystery-client also pointed to overall improvement of in the attitudes than those who did not benefit from the training. However, shortages of staff and frequent transfers limited the overall effects 2 months after the training (Renju et al. 2010). In Ghana, several NGOs do provide training for health workers but this has mainly been limited in scale. A comprehensive training for all health workers will help reduce attitudes that impede SRHR services including HPS.

CHAPTER FIVE: DISCUSIONS AND ANALYSIS OF THE FINDINGS

This chapter present the analysis and discussion of the findings from the study. Analysis and discussion focus on the interaction and interplay of the two main construct that is the individual determinant (demand side) and the health service determinants (supply side).

5.1 Analysis of key findings

5.1.1 Approachability and ability to perceive

In Ghana, the perception of need and the desire for HPS is influenced by the level of education, age, perception of vulnerability and visibility (media advertisement, outreach) of the services providers. According to the DHS in 2014, 82% of the young people in Ghana are literate. This means that, majority of young people in the country are able to read and write or able to have basic understanding of health information. Also, schooling associated with age as most of the time, age determines the stage of one's schooling. This implies that, young people who are older are likely to have more access to information than the younger ones and may also be at a higher level of education than the younger one. Young people who think they are vulnerable and seek HPS probably did so because they want to be link early to treatment or take advantage of post-exposure prophylaxis that are available or know their status and led safe and healthy sexual life. Health care providers influence these abilities of young people in Ghana mainly through media. This may suggest that young people are turning away from the traditional sources of information (parents, teachers, and friends) to the more modern sources (radio and television and social media). Ghana's outreach programmes have visibly been very limited to peer-education programmes among most at risk groups. Although awareness about HPS is high in Ghana, the access has been limited to just awareness. The limited outreach programmes may have contributed to the low accessibility to HPS among young people.

5.1.2 Acceptability and ability to seek

Poor professional attitudes (being judgemental and disrespect) of some healthcare providers, culture and gender were identified as a factor affecting health care seeking behaviour among young people. Poor professional attitudes may be due to lack of training on how to deal with young people (provision of youth friendly service), poor training and supervision, poor selection of people who are not core part of HPS for training and the inability to dissociate their professional norms and values from that of the society. It is expected with the Ghanaian culture that, young people refrain from sex till marriage and most of the time, sex issues including information on HPS are not discus at home. Attending HTC or STI clinic will therefore raise bring to doubt young people's morality and may be tag as promiscuous or immoral especially when the most common sexual contact is the most common source of HIV infection in Ghana. The difference in access to HPS may be due to perception that females are at more risk of HIV and males are less vulnerable to HIV (Darteh et al. 2014). HPS which has now been integrated into SRHS and is dominated by female clients. Males may therefore not feel comfortable to seek treatment for HPS especially STI services. Also, HIV test is normally requested by officiating officials of marriages before the marriage ceremony are held by most religious organisations and females usually marry early than their male counterparts.

5.1.3 Availability, accommodation and ability to reach

For young people to reach HPS in Ghana, they are influenced by social support, geographical location, hours of opening and appointment mechanisms of HPS. The poor appointment mechanism may be due to the use of walk-in mechanism for making appointment for HPS.

HPS are available during schooling hours and young people have to miss classes in order to attend the clinic. The lack of support from societal actors especially parents may stem from lack of knowledge or information about HPS.

5.1.4 Affordability and ability to pay

The economic status, opportunity cost and direct cost of services were the main factors that influence use of HPS. Although HPS are almost free in Ghana, some medications for treatment of STI and laboratory investigations are not free. Young people who do not have enough capital or social networks may not be limited in accessing HPS

5.1.5 Appropriateness and ability to engage

The apparent gab in the knowledge of health care workers and caregiver support especially peer support were the key factors influencing the consequence or the health care outcome. Shortages of staff and materials such as test kit slow down the process during HPS affecting the quality of services as well as discouraging young people from using the HPS. The call for integration of HPS into SRH services may have reduces the stigma usually associated with using specialised centres which are usually labelled by the society. The integration may have improved service delivery by being able to give a comprehensive package at a goal. However, this has also increase pressure on the services leading to long queue and discouraging young people from using the services. The preference for peer support may be because young people feel more comfortable or identify themselves with the peer educators as friends than older caregivers involved in HPS. Older caregivers are probably seen as parents and the young people are not comfortable to receive HPS from them.

5.2 Implementation of recommended interventions

The implementation of recommended interventions will improve HPS services in Ghana but this will come with many challenges. Ensuring adequate funding of the interventions, the acceptance of key stakeholders especially parents (consent of parents or guardian in the case mobile HTC in schools), provision of resources, training of health workers and the integration of these services into the existing interventions will be important for the success of these interventions.

5.3 Study limitations

The unavailability of disaggregated sex and age data on use of HIV services in Ghana was a limitation to the study. There was lack of evidence-based interventions despite numerous intervention projects. The few available interventions were on a small scale.

5.4 Utility of the conceptual model

The access to health services model (Levesque et al. 2013) is a useful model. The model gives a broad meaning of access from the very thought of a need for services to the use of the health services as well as the interactions and outcome of the interaction. The concepts are generally clear and enable me to explore the determinant of access to health care services. The arrangements enable analysis of the determinant of health care access from the perception of need from both the individual perspective and the health service perspective. It also describes at each stage the influences of other construct in the model. The model has been widely used in different areas of health service provision. However, the concepts in the model are overlapping and this has been duly acknowledged by the developer of the model. In relation to HPS, some concepts in the model were less relevant. For instance, HPS services are free and having health insurance will not affect accessibility to HPS. The model also fails to acknowledge the political (policy and governance) issues that influence access to health

care services in development of its construct. The political structures in most counties determines the allocation of resources which is use to provide care. They also make laws that govern health care delivery. Nevertheless, the model is useful in understanding the determinants of HPS in Ghana.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Although the research focused on the HPS services based in health facilities, this cannot be achieved by sorely addressing the problem of accessibility from the health service perspective. Improving accessibility of HPS services among young people will mostly depend on the improving the environmental conditions that influence accessibility including stigma, non-judgemental attitudes and open discussion of the sexual needs of the young people. However, training of healthcare workers and improvement in the supply of the basic stocks and addressing unprofessional attitudes of healthcare workers cannot be ignored. There is a need for policy makes, managers of health facilities, various associations for the young people must be involved and engage in the planning and implementation of interventions to address the challenges. They must also consider the opening hours of SRH centres to suit young people whiles extending HPS to the vicinities of educational institutions through outreach and mobile services areas of needs.

6.2 Recommendations

These recommendations are proposed based on the findings and analysis of the study.

6.2.1 Community level

The following recommendations are made to GAC and NGOs involved in SRHR/HIV activities;

1 There should be continuous engagement with religious, traditional and opinion leaders to address cultural norms that do not promote the sexual and reproductive health of young people.
2 Interventions programmes designed should include the entire community since access to HPS increases with the involvement of the whole community.
3 SRH communication including those on HIV and HPS should be given to parents and teachers to empower them to engage young people in conversations on HIV and HPS.

6.2.2 Health facility level

The following recommendations are made to health managers, administrators, NMC, GMC and NGOs involved in SRHR/HIV activities;

1. The integration of HIV services and SRH services should be strengthened.
2. Continuous education training courses on adolescent friendly services and inclusion of such courses for renewal of professional identification number.
3. Provision should be made for situations when there are lot of clients to increase the staff during those hours. Alternatively, booking of appoint by date and time can be incorporated into HPS to reduce waiting time.
4. Outreaches to schools and colleges as well as use of mobile vans will help.

6.2.3 National policy

The MOH, GAC, GHS, CHAG, NGOs involved in SRHR/HIV and other stakeholders should consider the following;

1. The regulation requiring the consent of parent of young people 16 years should be reconsidered and abolished.
2. Intervention programmes that have been successful in Ghana and outside Ghana should be scaled up to accelerate progress being made.
3. Campaigns on HIV and HPS through mass media and social media must be sustained and strengthened to increase the visibility of HPS in the country among young people.
4. Increase condom dispensing machines outlets through the country.

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ANNEXES

Annex one: Top ten causes of death in Ghana in 2012

Disease	Percentage of deaths
Lower respiratory infection	10.7
Stroke	8.7
Malaria	8.3
Ischaemic heart disease	5.8
HIV/AIDS	4.9
Preterm birth complications	3.7
Diarrhoea diseases	3.6
Birth asphyxia and birth trauma	3.5
Meningitis	3
Protein energy malnutrition	2.9

Source: WHO (2015)

Annex two: The population ration of key health professionals in Ghana

Key health Professionals	Health professionals/population ratio				
	2010	2011	2012	2013	2014
Nurses	1:1,516	1,1599	1:1,362	1:1,084	1:959
Midwives (WIFA /1 midwife)	1:1566	1:1505	1:1611	1:1,525	1:1,374
Medical Officers	1:11,698	1:10,40402	1:11,515	1:10,170	1:9,043

Source: MOH (2015a)

Annex three: Search terms

Alternative words used for factors influencing access	Alternative terms used for HIV preventive services	Alternative terms used for age group 10-24	Alternative terms for geographical scope
Health literacy	HIV testing and Counselling	Young people	Ghana
Health beliefs	Voluntary HIV testing and counselling	Adolescent	West Africa
Culture	Adolescent friendly service	Students	Sub-Saharan Africa
Gender	Youth friendly services	Youth	
Values	Information and education services	University	
Social support	Sexual education and counselling	Young girls	
Transport	Peer education	Young women	
Income	Sexual and reproductive health services	Young men	
Assets	Treatment Sexually Transmitted Infections	Young boys	
Social capital			
Health insurance			
Empowerment			
Information			
Caregiver support			
Adherence			
Approachability			
Acceptability			
Affordability			
Outreach			
Screening			
Professional values and norms			
Appointment mechanisms			
Hours of opening			
Technical and interpersonal quality			
Coordination and continuity			

Annex five: Search terms used in PubMed

“(((((("Health Services Accessibility/classification"[Mesh] OR "Health Services Accessibility/economics"[Mesh] OR "Health Services Accessibility/ethics"[Mesh] OR "Health Services Accessibility/history"[Mesh] OR "Health Services Accessibility/legislation and jurisprudence"[Mesh] OR "Health Services Accessibility/manpower"[Mesh] OR "Health Services Accessibility/methods"[Mesh] OR "Health Services Accessibility/organization and administration"[Mesh] OR "Health Services Accessibility/standards"[Mesh] OR "Health Services Accessibility/statistics and numerical data"[Mesh] OR "Health Services Accessibility/supply and distribution"[Mesh] OR "Health Services Accessibility/trends"[Mesh] OR "Health Services Accessibility/utilization"[Mesh])) AND ("HIV"[Mesh] OR "HIV Serosorting"[Mesh])) OR "Acquired Immunodeficiency Syndrome"[Mesh])) AND ("prevention and control"[Subheading] OR "Post-Exposure Prophylaxis"[Mesh])) AND ("Ghana/epidemiology"[Mesh] OR "Ghana/ethnology"[Mesh] OR "Ghana/statistics and numerical data"[Mesh])) OR ("Africa South of the Sahara/epidemiology"[Mesh] OR "Africa South of the Sahara/ethnology"[Mesh] OR "Africa South of the Sahara/statistics and numerical data"[Mesh] OR "Africa South of the Sahara/therapeutic use"[Mesh])”.